

THE REGIONAL MUNICIPALITY OF YORK

BILL NO. 9

BY-LAW NO. S-0064-2005-009

A by-law to regulate the discharge of sewage and land drainage
in The Regional Municipality of York

The Council of The Regional Municipality of York enacts as follows:

1. DEFINITIONS

1.1 In this by-law:

- a) “biochemical oxygen demand (“BOD”) means the 5-day BOD which is the determination of the molecular oxygen utilized during a 5-day incubation period for the biochemical degradation of organic material (carbonaceous demand), including the oxygen used to oxidize inorganic material such as sulphides, ferrous iron, and where an inhibiting chemical has been added to prevent ammonia oxidation;
- b) “biosolids” means organic solid material recovered from the wastewater treatment process;
- c) “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;
- d) "best management practices plan" (BMP) means industry-wide practices containing requirements to reduce or eliminate the amount of contaminants discharged to a municipal sewer system or land drainage works, generally improve waste management practices, and to comply with the provisions of this by-law;
- e) “combustible liquid” means any liquid having a flash point at or above 37.8 degrees Celsius and below 93.3 degrees Celsius;
- f) “composite sample” means two or more grab samples of the discharge to the sewage works that have been combined automatically or manually and taken at intervals during the sampling;
- g) “cooling water” means water that is used in a process for the purpose of removing heat and that has not come into contact with any raw material, intermediate product, waste product or finished product, but does not include blowdown water;
- h) “discharger” means an individual, association, partnership, corporation, or municipality in occupation or having the charge, management or control of a plant, sewage, storm water or uncontaminated water to which this by-law applies and includes an agent or employee of such a person;
- i) “enforcement officer” means a person authorized by the Council of The Regional Municipality of York to carry out inspections, make observations, take samples and make measurements pursuant to this by-law;

- j) "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E. 19;
- k) "flammable liquid" means a liquid having a flash point below 37.8 degrees Celsius and having a vapour pressure not more than 275.8 kPa (absolute) at 37.8 degrees Celsius as determined by ASTM D323-99a, "Vapour Pressure of Petroleum Products" (Reid Method);
- l) "fuel" means alcohol, gasoline, naphtha, diesel fuel, fuel oil or any ignitable substance intended for use as a fuel;
- m) "grab sample" means a portion of the discharge from or deposit to the sewage works taken at a maintenance access hole or another location established pursuant to subsection 8.2 of this by-law;
- n) "hailed sewage" means waste removed from a cesspool, a septic tank system, a privy vault or privy pit, a chemical toilet, a portable toilet, a sewage holding tank or a sewage works;
- o) "hailed waste" means any industrial waste which is transported to and deposited into any location in the sewage works but does not include hailed sewage;
- p) "hazardous waste" means acute hazardous waste chemicals, hazardous industrial waste, hazardous waste chemicals or severely toxic waste or any combination thereof as defined by O.Reg 347/90, made under the *Environmental Protection Act*, as amended from time to time;
- q) "ignitable waste" means ignitable as defined by O.Reg 347/90, made under the *Environmental Protection Act*, as amended from time to time;
- r) "industrial" means of or pertaining to industry, manufacturing, commerce, trade, business, or institutions as distinguished from domestic or residential;
- s) "maintenance access hole" means an access point in a private sewer connection to allow for the observation, sampling, and flow measurement of the sewage, uncontaminated water or storm water therein;
- t) "pathological waste" means pathological waste as defined by O.Reg 347/90, made under the *Environmental Protection Act*, as amended from time to time;
- u) "PCBs" means any monochlorinated or polychlorinated biphenyl or any mixture of them or mixture that contains one or more of them;
- v) "pesticide" means a pesticide as defined and regulated under the *Pesticides Act*, R.S.O. 1990, c.P.11;
- w) "pollution prevention" means the use of processes, practices, materials or products that avoid, reduce or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution;
- x) "reactive waste" means reactive waste as defined by O.Reg 347/90, made under the *Environmental Protection Act*, as amended from time to time;
- y) "Region" means The Regional Municipality of York and its designated

representatives;

- z) “sanitary sewer” means a sewer for the collection and transmission of domestic, residential, commercial, or industrial sewage, or any combination thereof;
- aa) “sewage” means any liquid containing organic, inorganic, animal, vegetable or mineral matter in solution or in suspension, including floating materials, but does not include storm water or uncontaminated water;
- bb) “sewage works” means any works for the collection, transmission, treatment or disposal of sewage, storm water and uncontaminated water, including a sanitary sewer or storm sewer, or any part of such works, but does not include plumbing or other works to which the *Building Code Act, 1992* applies;
- cc) “site” means any industrial location capable of discharging to a sewage works;
- dd) “spill” means a direct or indirect discharge or deposit to a sewage works or to the natural environment which is abnormal in quantity or quality in light of all the circumstances of the discharge or deposit;
- ee) “Standard Methods” means a procedure or method set out in the most recent edition of “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, or the Ontario Ministry of the Environment’s equivalent of a standard method;
- ff) “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 and includes surface runoff;
- gg) “storm water” means water from rainfall or other natural precipitation or from the melting of snow or ice;
- hh) “uncontaminated water” means municipally treated drinking water or any water to which no matter has been added intentionally or unintentionally;
- ii) “waste disposal site leachate” means the liquid containing dissolved or suspended contaminants which emanates from waste and is produced by water percolating through the waste or by liquid in the waste; and,
- jj) “waste radioactive prescribed substances” means uranium, thorium, plutonium, neptunium, deuterium, their respective derivatives and compounds and such other substances as the Canadian Nuclear Safety Commission may designate as being capable of releasing atomic energy or as being requisite for the production, use or application of atomic energy.

2. SANITARY SEWER REQUIREMENTS

2.1 No discharger shall cause or permit the deposit or discharge of sewage into a sanitary sewer in circumstances where,

- a) to do so may cause or result in:
 - (i) a health or safety hazard to a person authorized 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;
 - (iii) biosolids from the sewage works to which either sewage discharges, directly or indirectly, failing to meet the objectives and criteria set out 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) the discharge of dyes or colouring materials which can pass through a sewage works and discolour the sewage works effluent;
 - (v) interference with the operation or maintenance of a sewage works;
 - (vi) an offensive odour to emanate from the sanitary sewer;
 - (vii) damage to the sewage works; 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 layers; or
 - (iii) a temperature greater than 60 degrees Celsius.
- c) the sewage contains:
 - (i) combustible liquid;
 - (ii) flammable liquid;
 - (iii) fuel;
 - (iv) hauled sewage, except where:
 - (A) the carrier of the hauled sewage is a waste management system operating under a certificate of approval, provisional certificate of approval or order issued under the *Environmental Protection Act* or a regulation made thereunder, including a regulation to exempt the system from the requirement of a certificate of approval or a provisional certificate of approval;
 - (B) a copy of the most recent certificate of approval or provisional certificate of approval and any amendment is provided to the Region; and
 - (C) the carrier meets all conditions for discharge that are or may be required from time to time by the Region in writing;

- (v) hauled waste, except where:
 - (A) the carrier of the hauled waste is a waste management system operating under a certificate of approval, provisional certificate of approval or order issued under the *Environmental Protection Act* or a regulation made thereunder, including a regulation exempting the system from the requirement to have a certificate of approval or a provisional certificate of approval;
 - (B) a copy of the most recent certificate of approval, provisional certificate of approval or order and any amendment is provided to the Region;
 - (C) hauled waste meets the conditions set out in clauses 23(3)(c) and 25(5)(b) of O.Reg 347/90, as amended from time to time; and
 - (D) the carrier meets all conditions for discharge that are or may be required from time to time by the Region in writing;
- (vi) hazardous waste;
- (vii) ignitable waste;
- (viii) pathological waste;
- (ix) PCBs, except where:
 - (A) the discharger has a certificate of approval for a mobile site or PCB mobile waste disposal system issued under the *Environmental Protection Act*, or, where the discharger is claiming an exemption under a regulation, the discharger has demonstrated to the Region that the conditions of the exemption are met;
 - (B) a copy of the most recent certificate of approval or provisional certificate of approval and any amendment is provided to the Region; and
 - (C) the discharger has written notice from the Region for the discharge of the PCBs to the sewage works;
- (x) pesticide;
- (xi) reactive waste;
- (xii) waste radioactive prescribed substances, except where:
 - (A) 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
 - (B) a copy of the licence has been provided to the Region;
- (xiii) waste disposal site leachate, except where:
 - (A) the discharger has written approval from the Region which authorizes the discharge or deposit of the waste disposal site leachate to the sewage works; and

- (B) a certificate of approval, provisional certificate of approval or order has been issued which includes a provision for the disposal of waste disposal site leachate to a sewage works, and a copy of the certificate of approval, provisional certificate of approval or order is provided to the Region, or, where the discharger is claiming an exemption pursuant to a regulation, the discharger has demonstrated to the Region that the conditions of the exemption are being met; or
 - (xiv) a concentration which exceeds any one or more of the limits in Table 1 or Table 2 as applicable, and as set out in Schedule “A” of this by-law, entitled “Limits for Sanitary Sewer Discharge”.
- 2.2 The discharge of storm water or uncontaminated water to a sanitary sewer is prohibited except in an emergency situation where the Region has provided either verbal or written approval prior to the discharge, or, where the Region has provided written approval for a non-emergency discharge and the discharger is complying with the terms and conditions of the approval.
- 2.3 The discharge to a sanitary sewer of water originating from a source separate from the municipal water distribution system is prohibited except where the discharger:
 - a) provides written notice to the Region setting out the amount of water, location of the water source, and address of the discharger where the water is being used and from which it is being discharged;
 - b) provides the Region with a copy of a valid Permit to Take Water in respect of the taking of the water that is being discharged or deposited, where such a Permit to Take Water is required by the *Ontario Water Resources Act*, R.S.O. 1990, c.O.14, as amended; and
 - c) has written discharge approval from the Region, prior to any discharge, and the discharger is complying with the terms and conditions of the approval.
- 2.4 The provisions of subsection 2.1(c)(xiv) do not apply where the discharge is regulated by an approved surcharge agreement, compliance program, best management practices plan or otherwise authorized by the Region in accordance with the provisions of this by-law.

3. PROHIBITION OF DILUTION

- 3.1 No person shall discharge or deposit or cause or permit the discharge of sewage into a sanitary sewer or storm sewer in circumstances where water has been added to the discharge for the purposes of dilution, if such discharge or deposit would otherwise be in contravention of Part 2 or 4 of this by-law.

4. STORM SEWER REQUIREMENTS

- 4.1 No discharger shall cause or permit the deposit or discharge of storm water or uncontaminated water to a storm sewer which may or could:
- a) interfere with the 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 other adverse impact, to any person, animal, property, or vegetation;
 - e) impair or likely impair the quality of the water in any well, lake, river, pond, spring, stream, reservoir or other water or watercourse;
 - f) contravene or result in the contravention of a certificate of approval or provisional certificate of approval or order issued under the *Ontario Water Resources Act* or the *Environmental Protection Act*;
 - g) have one or more of the following characteristics:
 - (i) two or more separate layers;
 - (ii) a visible film, sheen or discoloration;
 - (iii) a temperature greater than 40 degrees Celsius; or
 - (iv) a pH less than 6.0 or greater than 9.0;
 - h) contain one or more of the following:
 - (i) blowdown water;
 - (ii) combustible liquid;
 - (iii) flammable liquid;
 - (iv) floating debris;
 - (v) fuel;
 - (vi) hauled sewage;
 - (vii) hauled waste;
 - (viii) hazardous waste;
 - (ix) ignitable waste;
 - (x) pathological waste;
 - (xi) PCBs;
 - (xii) pesticides;
 - (xiii) reactive waste;
 - (xiv) sewage;
 - (xv) waste radioactive prescribed substances;
 - (xvi) waste disposal site leachate;
 - (xvii) a substance from raw materials, intermediate or final materials, used or produced in, through or from an industrial process;
 - (xviii) a substance used in the operation or maintenance of an industrial site or,
 - (xix) a concentration which exceeds any one or more of the limits in Table 3 or Table 4 as applicable, and as set out in Schedule "A" of this by-law, entitled "Limits for Storm Sewer Discharge".

- 4.2 The provisions of subsection 4.1(h)(xix) do not apply where the discharge is regulated by an approved compliance program, best management practices plan, or otherwise authorized by the Region in accordance with the provisions of this by-law.

5. REPORTING OF SITE INFORMATION BY INDUSTRIAL DISCHARGERS

- 5.1 A discharger shall complete and submit a Waste Survey Report to the Region within 30 days of written notification by the Region that such report is required. The Waste Survey Report shall be in the form of either the Abbreviated Waste Survey Report or the Comprehensive Waste Survey Report as attached to this by-law as Schedule “B” and “C” respectively, as determined by the Region.
- 5.2 Where an industrial discharger is required by the Region to complete a Waste Survey Report, the discharger shall provide written notice of any change in the information requested in the report within 30 days of the effective date of such change. Such notice shall include pertinent details of any change to the operation, process, or wastewater treatment facilities, and shall include any analyses of the discharge.

6. SURCHARGE AGREEMENT

- 6.1 Subject to subsections 6.2 and 6.3, 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 to the extent permitted by agreement with the Region under such conditions with respect to payment of additional sewage service rates or otherwise as may be necessary to compensate the Region for any additional costs of operation, repair, and maintenance of the sewage works.
- 6.2 An agreement referred to in subsection 6.1 may be made only with respect to any one or more of the following parameters:
- a) Biochemical Oxygen Demand (BOD5);
 - b) Phenolics (4AAP);
 - c) Oil & Grease (Solvent Extractibles); Animal/Vegetable
 - d) Phosphorus, Total;
 - e) Suspended Solids, Total; or
 - f) Total Kjeldahl Nitrogen.
- 6.3 An agreement shall contain terms and conditions related to the calculation and payment for the discharge, including provision for a minimum surcharge fee. The surcharge fee shall be determined in accordance with the Surcharge Formula attached to this by-law as Schedule “D”. The surcharge agreement shall be generally in the form designated by the Region from time to time.
- 6.4 During the term of an agreement, the discharger is exempt from meeting the limits set out in 2.1(c)(xiv) for the parameter(s) included in the agreement, provided the discharger is in compliance with all of the terms and conditions in the agreement.

- 6.5 Notwithstanding section 5.2, where a discharger has entered into an agreement, any change in the information provided to the Region in the Waste Survey Report shall be submitted to the Region prior to the change to allow sufficient assessment of the change on the agreement.
- 6.6 The Region may terminate an agreement at any time and for any reason, including a failure to meet the conditions in the agreement, and the termination will be effective within 30 days of a written notice of termination.

7. COMPLIANCE PROGRAM

- 7.1 A discharger may submit to the Region a proposed compliance program to prevent, reduce or control the non-compliance discharge of sewage, storm water, or uncontaminated water from the discharger's premises into the municipal sewer system.
- 7.2 The Region may issue a compliance program approval for any discharge which would otherwise not comply with this by-law, in the amount and to the extent set out in the approval, during the planning, design, construction and installation of facilities or works necessary to implement the approved compliance program.
- 7.3 The compliance program shall include the following conditions or limitations:
- a) the term of the compliance program shall be for a specified length of time during which time the discharger shall implement the corrective or remedial actions required to eliminate the non-compliance;
 - b) corrective or remedial actions to be implemented shall be specific, including the dates of commencement and completion of such actions, and the materials or other characteristics of the matter to which it relates;
 - c) the final action completion date shall not be later than the final compliance date in the compliance program;
 - d) a progress reporting requirement to the Region within a specified period of time of the scheduled completion date of each action listed in the compliance program;
 - e) the Region may terminate the compliance program by written notice to the discharger at any time where there is an immediate threat or danger to any person, animal, property, vegetation, or any other adverse impact to the sewage works, or where the discharger fails or neglects to implement or diligently pursue the actions required under the approved compliance program;
 - f) where a compliance program has been terminated, the discharger shall immediately comply with all provisions of this by-law.
- 7.4 A discharger to whom a compliance program approval has been issued shall not be prosecuted under Part 2 or 4 of this by-law for the discharge or deposit of sewage, uncontaminated water or storm water provided such discharge or deposits is in compliance with the approved compliance program.

8. SAMPLING AND ANALYTICAL REQUIREMENTS

- 8.1 The discharger shall install and maintain in good repair a maintenance access hole for each connection from the site of the discharger to the sewage works for the purpose of observation, sampling and measurement of the flow of discharges or deposits therein.
- 8.2 Notwithstanding subsection 8.1, where the installation of a maintenance access hole is not possible or is not acceptable to the Region, an alternative device or facility may be substituted with the written approval of the Region.
- 8.3 The maintenance access hole, device or facility shall be:
- a) located on the property of the discharger, unless the Region provides written approval for a different location;
 - b) designed and constructed in accordance with good engineering practice, in a manner acceptable to the Region, at the discharger's expense;
 - c) accessible at any time to the Region for the purpose of observation, sampling and measurement of the flow of discharges or deposits therein.
- 8.4 The Region, by written notice, may require a discharger to sample and analyze one or more discharges or deposits from a site and submit the results and/or the samples to the Region.
- 8.5 For the purpose of the administration and enforcement of this by-law, a person appointed by the Council of the Region for the purpose shall be entitled, upon production of his or her identification, enter any industrial discharger premises, to observe, to measure the discharge flow to any sewer, and to collect any samples required.
- 8.6 The Region may establish non-compliance with this by-law on the basis of a grab sample or a composite sample which may contain additives for its preservation, may be collected manually or by using an automatic sampling device, and analyzed in accordance with the procedures and methods set out in Standard Methods or equivalent.
- 8.7 For each of the metals whose concentration is limited in Table 1, Table 2, Table 3 or Table 4 the analysis shall be for the quantity of total metal, which includes all metal both dissolved and particulate.

9. SPILLS

- 9.1 In the event of a spill to a sewage works, the discharger shall immediately notify the Region, provide any information with respect to the spill which the Region advises it requires and complete any work the Region may require to mitigate the spill.
- 9.2 Notwithstanding subsection 9.1, the discharger shall do everything possible to contain the spill, protect the health and safety of citizens, minimize damage to property, protect the environment, clean-up the spill and restore the affected area to its condition prior to the spill event.
- 9.3 The discharger shall provide a written report on the spill to the Region, within 5 days after the spill, containing the following information:
- a) location where the spill occurred;
 - b) name and phone number of person who reported the spill and location where such person can be contacted;

- c) date and time of spill;
- d) material spilled;
- e) characteristics of the material(s) spilled;
- f) volume of the material(s) spilled;
- g) duration of spill event;
- h) work completed and/or still in progress to mitigate the spill; and
- i) preventative actions being taken to ensure the situation does not occur again.

10. POLLUTION PREVENTION PLANS

- 10.1 The Region may require an industrial discharger to develop a pollution prevention plan for the discharge of any parameter designated by the Region, where the discharger is or has been:
- a) out of compliance with Part 2-Sanitary Sewer Requirements; or
 - b) out of compliance with Part 4-Storm Sewer Requirements; or
 - c) in a compliance program with the Region; or
 - d) responsible for one or more spill(s) to a sewage or land drainage works.
- 10.2 Pollution prevention plans shall comply with any guidelines established by the Region.
- 10.3 The pollution prevention shall be completed by the discharger and available for review by the Region at the site of the discharger within 18 months of notification by the Region.
- 10.4 The Region may exempt a discharger from developing a Pollution Prevention Plan where the discharger has in place an ISO 14001 Program which is currently registered by a third party auditor accredited by the Standard Council of Canada or the Registrar Accreditation Board.

11. DENTAL WASTE AMALGAM SEPARATORS

- 11.1 Any dental practice within The Regional Municipality of York shall comply with the *Dentistry Act*, 1991, S.O. 1991, c.24, and the regulations made thereunder, as amended from time to time, for the disposal of amalgam waste.

12. OFFENCES

- 12.1 Every discharger other than a corporation who contravenes any provision of this by-law is guilty of an offence and upon conviction is liable to a fine of not more than \$10,000.00, and to a fine of \$25,000.00 for any subsequent conviction.
- 12.2 Any discharger who contravenes any provision of this by-law is guilty of an offence and upon conviction is liable to a fine of not more than \$50,000.00 and to a fine of \$100,000.00 for any subsequent conviction.
- 12.3 In this by-law, subsequent conviction means a conviction for an offence which offence occurs after the date of conviction for an earlier offence under this by-law or By-law S-057-92-155.

13. ENFORCEMENT

13.1 The persons designated in Schedule "E" are hereby designated as Provincial Offence Officers for the enforcement of this by-law.

14. SCHEDULES

14.1 Schedules "A", "B", "C", "D" and "E" shall form part of this by-law.

15. REPEAL

15.1 By-law S-057-92-155 is hereby repealed.

ENACTED AND PASSED this 20th day of January, 2005.

Denis Kelly
Regional Clerk

Bill Fisch
Regional Chair

SCHEDULE “A”

Table 1 – Limits for Sanitary Discharge effective until December 31, 2006

Parameter Type	Sanitary Parameter	York Current
Conventional (mg/L)	Biochemical Oxygen Demand (BOD)	300
	Total Kjeldahl Nitrogen	100
	Oil & Grease – Mineral & Synthetic	15
	Oil & Grease – Animal and Vegetable	150
	Phenolics (4AAP)	1
	Phosphorous (Total)	10
	Suspended Solids (Total)	350
Other (mg/L)	Cyanide (Total)	2
	Chloride	1500
	Fluoride	10
	Sulphate	1500
Metals (mg/L)	Aluminum (Total)	50
	Antimony (Total)	5
	Arsenic (Total)	1
	Cadmium (Total)	1
	Chromium (Total)	5
	Cobalt (Total)	5
	Copper (Total)	3
	Iron (Total)	50
	Lead (Total)	5
	Manganese (Total)	5
	Mercury (Total)	0.1
	Molybdenum (Total)	5
	Nickel (Total)	3
	Selenium (Total)	5
	Silver (Total)	5
	Tin (Total)	5
	Titanium (Total)	5
	Vanadium	5
Zinc (Total)	3	

Table 2 - Limits for Sanitary Sewer Discharge Effective January 1, 2007

Type of Parameter	Parameter	Limit
Conventional	Biochemical Oxygen Demand (BOD)	300 mg/L
	Total Kjeldahl Nitrogen	100 mg/L
	Oil & Grease – Mineral & Synthetic	15 mg/L
	Oil & Grease – Animal and Vegetable	150 mg/L
	Phenolics (4AAP)	1 mg/L
	Phosphorous (Total)	10 mg/L
	Suspended Solids (Total)	350 mg/L
	Other	Cyanide (Total)
Fluoride		10 mg/L
Sulphate		1500 mg/L
Metals	Aluminum (Total)	50 mg/L
	Antimony (Total)	5 mg/L
	Arsenic (Total)	1 mg/L
	Cadmium (Total)	0.7 mg/L
	Chromium (Total)	2 mg/L
	Cobalt (Total)	5 mg/L
	Copper (Total)	3 mg/L
	Lead (Total)	1 mg/L
	Manganese (Total)	5 mg/L
	Mercury (Total)	0.01 mg/L
	Molybdenum (Total)	5 mg/L
	Nickel (Total)	2 mg/L
	Selenium (Total)	1 mg/L
	Silver (Total)	5 mg/L
	Tin (Total)	5 mg/L
	Titanium (Total)	5 mg/L
Zinc (Total)	2 mg/L	
Organics	Benzene	10 ug/L
	Chloroform	40 ug/L
	1,2 –dichlorobenzene	50 ug/L
	1,4 –dichlorobenzene	80 ug/L
	Cis-1,2 –dichloroethylene	4,000 ug/L
	Trans- 1,3 – dichloropropylene	140 ug/L
	Ethylbenzene	160 ug/L
	Methylene chloride	2,000 ug/L
	1,1,2,2 –tetrachloroethane	1,400 ug/L
	Tetrachloroethylene	1,000 ug/L
	Toluene	270 ug/L
	Trichloroethylene	400 ug/L
	Xylenes (Total)	1,400 ug/L
	Di-n-butyl phthalate	80 ug/L
	Bis (2-ethylhexyl) phthalate	12 ug/L
	PCBs	1 ug/L
	Methyl Ethyl Ketone	8000 ug/L
Styrene	200 ug/L	
Nonylphenols	20 ug/L	
Nonylphenol ethoxylates	200 ug/L	

Table 3 – Limits for Storm Sewer Discharge effective until December 31, 2006

Parameter Type	Storm Parameter	York Current
Conventional (mg/L)	Biochemical Oxygen Demand (BOD)	15
	Total Kjeldahl Nitrogen	1
	Phosphorous (Total)	0.3
	Suspended Solids (Total)	15
Other (mg/L)	Ammonia	1
	Chloride	500
	Fluoride	2
	Sulphate	500
Metals (mg/L)	Aluminum (Total)	1
	Antimony (Total)	0.05
	Arsenic (Total)	0.001
	Bismuth	0.05
	Cadmium (Total)	0.001
	Chromium (Total)	0.2
	Cobalt (Total)	0.05
	Copper (Total)	0.01
	Iron	1
	Lead (Total)	0.05
	Manganese (Total)	0.2
	Mercury (Total)	0.001
	Molybdenum (Total)	0.05
	Nickel (Total)	0.05
	Selenium (Total)	0.1
	Silver (Total)	0.1
	Tin (Total)	0.1
	Titanium (Total)	0.05
	Vanadium	0.05
Zinc (Total)	0.05	

Table 4 - Limits for Storm Sewer Discharge Effective January 1, 2007

Type of Parameter	Parameter	Limit
Conventional	Biochemical Oxygen Demand (BOD)	15 mg/L
	Total Kjeldahl Nitrogen	1 mg/L
	Phenolics (4AAP)	0.008 mg/L
	Phosphorous (Total)	0.400 mg/L
	Suspended Solids (Total)	15 mg/L
	Cyanide (Total)	0.020 mg/L
Metals	Arsenic (Total)	0.020 mg/L
	Cadmium (Total)	0.008 mg/L
	Chromium (Total)	0.080 mg/L
	Copper (Total)	0.050 mg/L
	Lead (Total)	0.120 mg/L
	Manganese (Total)	0.150 mg/L
	Mercury (Total)	0.0004 mg/L
	Nickel (Total)	0.080 mg/L
	Selenium (Total)	0.020 mg/L
	Silver (Total)	0.120 mg/L
	Zinc (Total)	0.040 mg/L
	Organics	Benzene
Chloroform		2.0 ug/L
1,2 –dichlorobenzene		5.6 ug/L
1,4 –dichlorobenzene		6.8 ug/L
Cis-1,2 –dichloroethylene		5.6 ug/L
Trans- 1,3 – dichloropropylene		5.6 ug/L
Ethylbenzene		2.0 ug/L
Methylene chloride		5.2 ug/L
1,1,2,2 –tetrachloroethane		17.0 ug/L
Tetrachloroethylene		4.4 ug/L
Toluene		2.0 ug/L
Trichloroethylene		8.0 ug/L
Xylenes (Total)		4.4 ug/L
Di-n-butyl phthalate		15.0 ug/L
Bis (2-ethylhexyl) phthalate		8.8 ug/L
PCBs	0.4 ug/L	

SCHEDULE "B"

THE REGIONAL MUNICIPALITY OF YORK
ABBREVIATED WASTE SURVEY REPORT

SECTION 1: General Information

- (a) Name of Company: _____
- (b) Location/Mailing Address:
- Plant: _____
- Main Office: _____
- (c) Telephone Number: Plant: _____
Main Office: _____
- (d) Name of Company Officer submitting Report:

Name Title Telephone Number
- (e) Date of Survey Report Completion: _____

SECTION 2: Product of Service Information

- (a) Number of Employees:
Plant: _____ Office: _____
- (b) # of Shifts per day: _____ # of days per week: _____
- (c) Brief description of manufacturing process or service activities:

(d) Final products or services rendered:

SECTION 3: Waste Characteristics and Disposal:

(a) Consumption of water per day:

(Please provide your water consumption data for the past year)

(b) Please list the types and volumes of chemicals used in your manufacturing Processes and/or stored on site.

Chemicals:	Quantities:
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

(c) Please list the type of chemicals, cooling water, or other waste materials discharged to the sanitary sewer:

- (d) Is your wastewater subjected to any type of treatment before discharge into the sewer system? Please describe the treatment.

- (e) If your company has analyzed its wastewater at any time, please provide us with copies of analyses, and name of the laboratory.

- (f) Does your company have any agreement with the Region regarding wastewater discharges to sewer system? If yes, please provide explanation.

- (g) Please describe locations of sanitary sewer outlets from your plant. Also, is there a manhole available at each location for inspection and sampling purposes?

- (h) Does your company have sampling of flow measurement equipment available? If yes, please list the type and make.

- (i) Does your company use, handle, or store any compounds on site that contain any amount of Mercury?

SCHEDULE "C"

THE REGIONAL MUNICIPALITY OF YORK
COMPREHENSIVE WASTE SURVEY REPORT

Date of Survey: _____

Area Region: _____

SECTION 1 – General Information

(a) Name of person submitting report: _____
(Name)

(Title)

(Company Name, Corporation, Owner)

(Telephone Number)

(Type of Industry)

(Mailing address) (Postal Code)

(b) Company Officer responsible for effluent control:

Name Title Telephone Number

(c) Location of premises:

(Street Name, Number, Block Number, Unit Number, Region)

THE INFORMATION CONTAINED IN THIS REPORT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, IS TRUE, COMPLETE AND ACCURATE.

(Authorized Representative)

(Title)

(Date)

SECTION 2 – Product or Service Information

(a) Brief description of manufacturing or service activities:

(b) Principal products produced or services rendered:

(c) Number of employees:

Plant: _____ Office: _____

(d) Number of shifts per day: _____ Number of days per week: _____

(e) Are major process:

() Batch () Continuous () Both

If batch, average number of batches per 24-hour day: _____

(f) Is the production subject to seasonal variation: () Yes () No

If yes, briefly describe seasonal production cycle:

(g) Is there a special clean-up period: () Yes () No

If yes, briefly describe clean-up period activities:

(h) Proximity of chemical storage to floor drains and whether floor drainage discharges to storm or sanitary sewers:

(i) Description of spill control practices that the facility uses,
(Site Hazards and Recommended Safety Procedures):

- (i) Information of past spill: _____
- (ii) Unusual discharges: _____
- (iii) Previous problems encountered: _____

SECTION 3 – Waste Characteristics

(a) List all sources of water supply:

- (1) Municipal water
- (2) Private well water
- (3) Hauled water
- (4) Other sources: _____

(b) Type of waste discharged (check all that apply):

<u>TYPE</u>	<u>AVERAGE FLOW/DAY</u> (m ³ / day)
<input type="checkbox"/> Sanitary Sewage	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Non-contact Cooling	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Contact Cooling	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Process Water	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Others	_____ <input type="checkbox"/> Estimated

(c) Wastes are discharged to (check all that apply):

<u>TYPE</u>	<u>AVERAGE FLOW/DAY</u> (m ³ / day)
<input type="checkbox"/> Sanitary #1	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Sanitary #2	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Storm Sewer #1	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Storm Sewer #2	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Ground Water	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Open Water	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Surface Water	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Pond/Creek/Stream	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Evaporation	_____ <input type="checkbox"/> Estimated
<input type="checkbox"/> Storage Tank	_____ <input type="checkbox"/> Estimated

* Haulage schedule – Where to, who, amount per haulage
(Attach additional list as necessary)

(d) Expected characteristics of wastes discharged to sanitary and storm sewers (complete Section 8, Pollutant Information Sheets, for the discharge to each sewer).

SECTION 4 – Physical Layout

Layout sketch of property (to scale or approximate) to co-ordinate buildings, pre-treatment works, property boundaries, effluent lines, and sanitary and storm sewer connections. (Number sewers so that they can be related to Pollutant Information Sheets).

Is there a manhole available for sampling?

If so, what is the location?

1. Location of last manhole: _____
2. Location of sampling manhole: _____
3. Location of flow meter(s): _____

SECTION 5 – Regulation 347 Information

For wastes discharged into or in connection to any sanitary sewer or combined sewer or storm sewer:

- (a) Generator registration number: _____

SECTION 6 – Regulation 347 Information

For wastes discharged into or in connection to any sanitary sewer or combined sewer or storm sewer (complete Section 6 for each sewer):

- (a) Description of waste:

- (b) Description of generating process:

- (c) Primary Characteristics:

Analytical data (if applicable):

Name of laboratory (if applicable):

- (d) Waste class: _____ Hazardous waste number: _____
Secondary characteristics:

Analytical data (if applicable):

SECTION 7 – Pre-treatment and Disposal

Pre-treatment devices or processes used for treating wastes or sludges before discharge to the sanitary sewer system (check as many as appropriate):

- | | |
|-------------------------------------------------------------------|---------------------------------------------------------------|
| <input type="checkbox"/> Air Floatation | <input type="checkbox"/> Screening |
| <input type="checkbox"/> Centrifuge | <input type="checkbox"/> Sedimentation |
| <input type="checkbox"/> Chemical Precipitation | <input type="checkbox"/> Septic Tank |
| <input type="checkbox"/> Chlorination | <input type="checkbox"/> Solvent Separation |
| <input type="checkbox"/> Cyclone | <input type="checkbox"/> Spill Protection |
| <input type="checkbox"/> Filtration | <input type="checkbox"/> Sump |
| <input type="checkbox"/> Flow Equalization | <input type="checkbox"/> Biological Treatment, Type _____ |
| <input type="checkbox"/> Grease or Oil Separation,
Type: _____ | <input type="checkbox"/> Rainwater Diversion or Storage _____ |
| <input type="checkbox"/> Grease Trap | <input type="checkbox"/> Other Chemical Treatment, Type _____ |
| <input type="checkbox"/> Grit Removal | <input type="checkbox"/> Other, Type _____ |
| <input type="checkbox"/> Ion Exchange | <input type="checkbox"/> No Pre-treatment Provided _____ |
| <input type="checkbox"/> Neutralization, pH correction | |
| <input type="checkbox"/> Ozonation | |
| <input type="checkbox"/> Reverse Osmosis | |

(1) Draw a flow diagram of your Pre-treatment Process below:

(2) Describe in detail the treatment process step by step:

(3) Effluent quality after pre-treatment process:

(a) Detailed description of existing pre-treatment facilities including operating data.

(b) Description of how solids are handled, stored/disposed.

(c) Description of recent changes or proposed that would affect the discharge characteristics.

(d) Description of operational problems or shutdowns of pre-treatment facilities.

(4) Any sludge generated from pre-treatment process:

(5) If yes, describe the treatment and disposal method for sludge removal.

SECTION 8 – Pollutant Information Sheet (Controlled Water)

Information for: () Sanitary Sewer () Storm Sewer

Sewer Number: _____

Indicate by placing an “x” in the appropriate box for each listed parameter whether it is “suspected to be absent”, “known to be absent”, “suspected to be present”, or “known to be present”, and the known or expected concentration in milligrams per litre.

Parameter	Known Present	Suspected Present	Known Absent	Suspected Absent	Concentration mg/L
1. Sulphates					
2. Aluminum					
3. Fluoride					
4. Phosphorus					
5. Antimony					
6. Chromium					
7. Cobalt					
8. Lead					
9. Manganese					
10. Molybdenum					
11. Selenium					
12. Silver					
13. Tin					
14. Titanium					
15. Copper					
16. Cyanide					
17. Nickel					
18. Zinc					
19. Arsenic					
20. Cadmium					
21. Phenolic Compounds					
22. Mercury					
23. BOD					
24. TSS					
25. Oil & Grease (Animal/Vegetable)					
26. Oil & Grease (Mineral/Synthetic)					
27. Kjeldahl Nitrogen					

SECTION 9 – Pollutant Information Sheet (No Discharge)

Information for: () Sanitary Sewer Number: _____

Indicate by placing an “x” in the appropriate box for each listed parameter whether it is “suspected to be absent”, “known to be absent”, “suspected to be present”, or “known to be present”, and the known or expected quantity in kg/month.

- (a) List pollutants that have the potential to enter wastewater due to spills, machinery malfunctions and process upsets.

Parameter	Known Present	Suspected Present	Known Absent	Suspected Absent	Concentration mg/L
28. Pesticides					
29. Acute Hazardous Waste Chemicals					
30. Fuels					
31. Hazardous Industrial Wastes					
32. Hazardous Wastes Chemicals					
33. Ignitable Wastes					
34. Pathological Wastes					
35. PCB Wastes					
36. Reactive Wastes					
37. Severely Toxic Materials					
38. Waste Radio-Active Materials					

Do you recover any chemicals from your wastewater? _____

If so, explain:

Does the Company have any existing agreements with the City/Town/Township about waste discharges exceeding storm and sanitary sewer by-law limits?

If so, explain:

Does the Company haul a wet or dry waste to a landfill disposal site? _____

If so, explain:

Does the Company have sampling or flow measurement equipment available?

SCHEDULE "D"

SURCHARGE FORMULA

BOD5 = Biochemical Oxygen Demand

S.S. = Suspended Solids (Residue)

T.P. = Total Phosphorus

TKN = Total Kjeldahl Nitrogen

O&G = Total Oil & Grease

PHENOLICS = Phenolic Compounds

SURCHARGE CALCULATION

$$\text{BOD5 CHARGE} = (\text{LOAD mg/L} - \text{LIMIT mg/L}) \times \frac{\text{Flow (m}^3\text{)}}{1000} \times \text{Rate (\$/kg)}$$

$$\text{S.S. CHARGE} = (\text{LOAD mg/L} - \text{LIMIT mg/L}) \times \frac{\text{Flow (m}^3\text{)}}{1000} \times \text{Rate (\$/kg)}$$

$$\text{T.P. CHARGE} = (\text{LOAD mg/L} - \text{LIMIT mg/L}) \times (5) \times \frac{\text{Flow (m}^3\text{)}}{1000} \times \text{Rate (\$/kg)}$$

$$\text{TKN CHARGE} = (\text{LOAD mg/L} - \text{LIMIT mg/L}) \times \frac{\text{Flow (m}^3\text{)}}{1000} \times \text{Rate (\$/kg)}$$

$$\text{O\&G CHARGE} = (\text{LOAD mg/L} - \text{LIMIT mg/L}) \times \frac{\text{Flow (m}^3\text{)}}{1000} \times \text{Rate (\$/kg)}$$

$$\text{PHENOLICS CHARGE} = (\text{LOAD mg/L} - \text{LIMIT mg/L}) \times \frac{\text{Flow (m}^3\text{)}}{1000} \times \text{Rate (\$/kg)}$$

GROUNDWATER DISCHARGE VOLUME CHARGE = Discharge Volume x Current Rate

- The Surcharge Rate and the Groundwater Rate are subject to change from time to time
- Current Surcharge Rate = \$0.3283/kg of overstrength loading (January 2002)
- Current Groundwater Discharge Rate = \$0.3689/m³ (January 2002)
- 1Kg of Phosphorus removed will produce approximately 5 kg of solids

SCHEDULE "E"

ENFORCEMENT

The following persons are hereby designated Provincial Offence Officers for the enforcement of this by-law:

1. James D. Hemmingway
2. Chi Fai Ng