

BY-LAW No. 8093

A By-law to Regulate the Disposal of Wastewater and Storm Water and
the Use of Watercourses within the City of Vancouver and to Repeal the
Stream Obstruction, Sewer Use Regulation and Plumbing By-laws

THE COUNCIL OF THE CITY OF VANCOUVER, in open meeting
assembled, enacts as follows:

SECTION 1 - ADMINISTRATION

1.1 SCOPE

- (1) This By-law may be cited as the "Wastewater, Storm Water and Watercourse By-law".
- (2) The provisions of this By-law apply to all direct or indirect discharges to any part of the public sewerage system, storm drainage system or any watercourse.
- (3) This By-law includes regulations of the quantity and quality of discharged wastes and the degree of pretreatment required, and provides for the approval of plans for waste treatment.

1.2 DEFINITIONS

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

"approved" means accepted by the Inspector;

"building drain" means the horizontal piping, including any vertical offset, that conducts wastewater, clear-water waste or storm water to a building sewer;

"building sewer" means a pipe that is connected to a building drain 1 m outside a wall of a building and that leads to a public sewer or a private sewage disposal system;

"City Engineer" means the person appointed as such by City Council pursuant to the provisions of the *Vancouver Charter* and includes Deputies to the City Engineer and Assistant City Engineers;

"clear-water waste" means water that does not contain wastewater or storm water;

"combined sewer" means a sewer that is intended to convey wastewater and storm water;

"combustible liquid" means any liquid having a flash point at or above 38° C and below 93° C;

"contaminated water" means water containing any substance whether gaseous, liquid or solid whether dissolved or suspended in a concentration that

- (a) injures or is capable of impairing the health or safety of a person,
- (b) injures or is capable of injuring property or any life form,
- (c) interferes with or is capable of interfering with the proper operation of a sewer, a sewage facility or storm drainage facility,
- (d) causes or is capable of causing material discomfort to a person, or
- (e) damages or is capable of damaging the environment;

"domestic wastewater" means the wastewater and water carried wastes which result from normal human living processes and are produced from non-industrial, non-institutional or non-commercial activities;

"effluent" means the liquid outflow of any facility designed to treat or convey wastewater;

"Fire Chief" means the person appointed as such by the City Council pursuant to the provisions of the *Vancouver Charter* and includes Deputies to the Fire Chief;

"fixture" means a receptacle, appliance, apparatus or other device that discharges wastewater, storm water or clear-water waste and includes floor drains and storm water catchbasins;

"fixture restriction" means a plumbing fixture elevation restriction;

"flammable liquid" means any of liquid having a flash point below 38° C and having a vapour pressure not exceeding 280 kPa at 38° C;

"flood level rim" means the top edge at which water can overflow from a fixture or device;

"floor drain" means a fixture used to receive water from the floor of a building;

"garbage" means solid waste;

"grease" means an organic substance recoverable by procedures set forth in "Standard Methods" and includes but is not limited to hydrocarbons, esters, fats, oils, waxes and high molecular carboxylic acids;

"industrial wastewater" means all wastewater and water carried waste and, for greater certainty, includes all wastewater from any processing, industrial, institutional and commercial activities but does not include domestic wastewater;

"Inspector" means the persons appointed as City Building Inspector by the City Council pursuant to the provisions of the *Vancouver Charter* and includes Deputies to the City Building Inspector and any other employee of the City authorized to inspect on behalf of the City Building Inspector;

"occupancy" means the use or intended use of a building or part thereof for the shelter or support of persons, animals or property;

"one family dwelling" means a building containing only one dwelling unit which is occupied or intended to be occupied as a permanent home or residence of one family;

"owner" means the registered owner, as the same appears on the records of the Vancouver Land Title Office, or if there is registered an agreement for sale and purchase, owner shall mean the person registered as the last holder either directly or by assignment of such agreement for sale and in the case of Crown-owned lands, owner shall mean the occupier;

"permit" means permission or authorization in writing by the Inspector to perform work regulated by this By-law and, in the case of an occupancy permit, to occupy any building or part thereof;

"pH" means the measure of the intensity of the acid or alkaline condition of a solution determined by the hydrogen ion activity of the solution in accordance with procedures set forth in "Standard Methods";

"plumbing fixtures" means plumbing fixtures as defined in the Building By-law;

"plumbing fixture elevation restriction" means the lowest elevation that a plumbing fixture can be installed such that the flood level rim of the plumbing fixture is not below the restricted elevation unless the plumbing fixture is pumped;

"plumbing system" means an assembly of pipes, fittings, fixtures, traps and appurtenances that is used to convey wastewater, clear-water waste or storm water to a public sewer or a private sewer disposal system;

"private sewage disposal system" means a privately owned plant for the treatment and disposal of wastewater;

"public sewer connection" means that part of the public sewer which connects or is intended to connect a building sewer with a public sewer;

"roof drain" means a fitting or device that is installed in the roof to permit storm water to discharge into a leader;

"sanitary plumbing system" means a plumbing system that conducts wastewater;

"sanitary sewer" means a sewer which carries wastewater and to which storm water is not intentionally admitted;

"separate system area" means an area in which the City Engineer has required the separate disposal of storm water and sewage;

"sewage" means any liquid waste other than clear-water waste or storm water;

"sewage sump" means an approved airtight tank or pit which receives wastewater or liquid waste and which is located below the normal grade of the gravity system and must be emptied by mechanical means;

"sewerage system" means a network of wastewater collection and conveyance facilities that gathers, treats, transports, uses or discharges wastewater;

"sewage treatment plant" means any arrangement of devices and structures used for treating wastewater;

"sewer" means a pipe or conduit that carries wastewater, storm water or clear-water waste;

"standard methods" means the analytical and examination procedures set forth in the 20th edition (1999) of "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, American Water Works Association and the Water Pollution Control Federation;

"storm drainage system" means a plumbing system that conveys storm water or clear-water waste;

"storm sewer" means a sewer which carries storm water, clear-water waste and uncontaminated water, but is not intended for wastewater;

"storm water" means water resulting from rainfall, snowfall or groundwater but does not mean water containing wastewater;

"sump" means a receptacle installed between the storm or combined sewer and the building storm system to intercept the flow of deleterious matter into the building or public sewer and to prevent the outflow of sewer gas;

"suspended solids" means the insoluble matter suspended in wastewater that is separable by laboratory filtration in accordance with the procedure described in "Standard Methods";

"trap" means a fitting or device that is designed to hold a liquid seal that will prevent the passage of gas but will not materially affect the flow of a liquid;

"trucked liquid wastes" means any waste that is collected and transported offsite by any other means than by discharge to a sewer, and includes but is not limited to septic tank waste, holding tank waste, oil and grease from interceptors, and other sludges of organic origin;

"wastewater" means the wasted water of the community derived from human, animal, mineral or vegetable sources including domestic wastewater and industrial wastewater, but does not include storm water or uncontaminated water;

"watercourse" means

- (a) a river, stream, creek, waterway, lagoon, lake, spring, swamp, marsh or other natural bodies of fresh water, or
- (b) a canal, ditch, reservoir or other man-made surface feature

whether it contains or conveys water continuously or intermittently.

1.3 INSPECTIONS

- (1) The Inspector is hereby authorized to enter into any property or premises at any reasonable time in order to ascertain whether or not the regulations contained in this By-law are being complied with.
- (2) No person shall hinder or prevent the Inspector from entering and making reasonable inspection of any building or premises whenever necessary to secure compliance with, or prevent a violation of, any provisions of this By-law.
- (3) Any person interfering with or obstructing the entry of the Inspector into any premises, after that person has identified himself or herself, shall be deemed to be guilty of an infraction of this By-law and shall be liable to the penalties hereof.

SECTION 2 SEWER CONNECTIONS

2.1 PERMIT FOR CONNECTION TO THE PUBLIC SEWER

No person shall connect any building sewer with any public sewer connection without first obtaining a permit to do so from the City Engineer.

2.2 NEW PUBLIC SEWER CONNECTION FOR CONSTRUCTION

Subject to Section 2.9, a new public sewer connection is required whenever:

- (a) a new house or building is constructed, or
- (b) an existing house or building is renovated and the estimated construction value is more than:
 - i) 100% of the latest building assessment (from the B.C. Assessment Authority), or
 - ii) \$95,000, whichever is the greater,and the work involves:
 - iii) extensive excavation work,
 - iv) enlargement of the plumbing system by adding two or more fixtures,
 - v) an increase in the number of bedrooms, or
 - vi) a resulting increased demand upon the existing sewer system after renovations are complete.

2.3 CONNECTION TO A PUBLIC SEWER

If any part of premises designed or used for human occupancy abuts upon a street in which there exists a public sewer opposite such premises, the premises shall be connected to a public sewer intended to receive either wastewater alone or wastewater and storm water.

2.4 SEPARATE PLUMBING SYSTEMS

The sanitary, plumbing system and storm drainage system of all buildings constructed after August 21, 1984 shall be entirely separate, and separate building sewers shall be constructed to the property line where any type of public sewer is available.

2.5 SEPARATE CONNECTION

- (1) Subject to Sentence (2), each separate parcel of land requires a separate public sewer connection.
- (2) The requirement of Sentence (1) shall not apply to air space parcels and the parcels from which they are subdivided if such parcels are or will be developed with a plumbing system which is the subject of registered reciprocal easements, satisfactory to the City Engineer and the Director of Legal Services, by which all owners have access to all parts of the plumbing system for inspection, maintenance, repair and replacement.

2.6 CONNECTION IN SEPARATE SYSTEM AREAS

In a separate system area no storm water drainage shall be conveyed from any premises into a sanitary sewer, and no wastewater shall be conveyed from any premises into a storm sewer.

2.7 FEES FOR SEWER CONNECTION

- (1) An applicant for connection to a public sewer shall pay the fees set out in Schedule A, which Schedule is attached to and forms part of this By-law.
- (2) Where a public sewer connection will have a diameter of more than 375 mm, the fee payable shall be the total cost of the public sewer connection including all costs of and incidental to the installation thereof, but in no event shall such fee be less than the sum specified in Schedule A for a 375 mm diameter connection, and the applicant for the connection shall deposit with the City Engineer an amount estimated by the City Engineer as sufficient to cover the costs.
- (3) Where a public sewer connection will have a diameter of more than 150 mm, the City Engineer may require the installation of a manhole, and the cost of building such manhole shall be as set out in Schedule A and shall be additional to the cost of the public sewer connection.

- (4) Where application is made to connect any building sewer to the public sewer and no public sewer connection has been laid and the location of the fitting at the public sewer is not satisfactory to the applicant, the City Engineer may install an additional fitting and the fee for such installation, which is in addition to the specified fee for the public sewer connection, shall be as provided for in Schedule A.
- (5) Where a portion of the public sewer connection has been included in pavement costs under a Local Improvement By-law, the charge for extending the public sewer connection to the property line shall be the total cost of the work except that the cost of such extension shall not exceed the fees set out in Schedule A.
- (6) Except as otherwise provided for by this By-law, a fee for a permit shall not be refunded.
- (7) Where the City has not yet commenced the work specified by the connection permit, the applicant may apply in writing to the City Engineer for cancellation of the permit and a refund of a portion of the fee, and where the City Engineer recommends the refund and certifies that the work has not been commenced and the permit has been cancelled, the Director of Finance may refund to the applicant such part of the fee as is recommended by the City Engineer.
- (8) An applicant for a change to a permit shall apply in writing to the City Engineer and pay any additional costs required under Schedule A and all extra costs incurred by the City as a result of the change.

2.8 LOCATION OF PUBLIC SEWER CONNECTION

Where a person applies for a permit to connect any building sewer with any public sewer connection, the City Engineer shall determine:

- (a) which main sewer the public sewer connection shall be connected with,
- (b) the location and depth of the public sewer connection, and
- (c) any plumbing fixture elevation restrictions that apply.

2.9 USE OF EXISTING PUBLIC SEWER CONNECTION

- (1) Upon application, the City Engineer may approve the use of an existing public sewer connection that was installed in 1985 or thereafter and which is not a combined connection provided that it meets the other requirements of this By-law and the City Engineer is satisfied that it is suitable for continued use.

- (2) The fee, including inspection, for the approval referred to in Sentence (1) shall be an amount equal to 20 percent of the connection fee set out in Schedule A.
- (3) In the case of one-family and two-family dwellings, if the existing public sewer connection has been found unsuitable for re-use, the inspection fee paid pursuant to Sentence (2) shall be applied toward the cost of a new connection, but in all other cases the fee shall not be refunded or otherwise applied.

2.10 PUBLIC SEWER ON PRIVATE PROPERTY

Where a public sewer is laid in private property in respect of which the City holds a sewer easement, no person shall connect to or disturb such sewer except by permission and direction of the City Engineer.

2.11 EXCAVATION OF STREET PROHIBITED

Except by permission of the City Engineer, no person shall excavate any portion of a street for the purpose of connecting a building sewer to a public sewer connection or for the purpose of unstopping a public sewer connection.

2.12 LOWERING OR ABANDONING PUBLIC SEWER CONNECTION

Where in order to meet the requirements of any applicant it is necessary for the City Engineer to lower or abandon an existing public sewer connection, the fee payable by the applicant for such work shall be the total cost of lowering the connection or replacing it or the sealing off of the connection if required by the City Engineer, including all costs of and incidental thereto, or the fees provided for in Schedule A for a public sewer connection of the diameter of the existing or replaced public sewer connection, whichever is the lesser.

2.13 CAPACITY OF PUBLIC SEWER

The City Engineer, if of the opinion that a public sewer or any portion thereof has insufficient capacity to handle existing or proposed wastewater or storm water runoff, may require that the amount of flow which can be discharged into the sewer via the public sewer connection be limited by satisfactory means.

2.14 NEW PUBLIC SEWER CONNECTION

Notwithstanding anything to the contrary contained in this By-law, when a new public sewer is laid in a street and a public sewer connection is installed opposite an abutting taxable parcel of real property not previously served by a public sewer, the building sewer shall be connected thereto, and the applicant shall pay the appropriate fee as set out in Schedule A.

2.15 EXTENSION OF A SEWER

Spur sewers may be constructed by the City Engineer at the expense of the City to serve any lot provided that the construction of each such sewer shall first have been authorized by the resolution of City Council.

2.16 RELOCATION OF EXISTING PUBLIC SEWER CONNECTION

Where in the opinion of the City Engineer the City can save costs by abandoning a sewer and providing a public sewer at an alternate or higher location, a property owner must, at the request of the City Engineer, make any changes in plumbing necessary to connect to the new service, and the City may reimburse the owner for all or part of the cost of such changes as recommended by the City Engineer and approved by City Council.

2.17 USE OF PUBLIC SEWER CONNECTIONS FOR DRAINAGE

During building operations or when the building sewer is being relaid, public sewer connections shall not be used for drainage purposes unless temporary sumps to catch sediment and strainers to catch floating solids have been installed to the satisfaction of the Inspector or the City Engineer.

2.18 UNSTOPPING SEWER

- (1) Where a building sewer or public sewer connection has become stopped, an application may be made to the City Engineer for unstopping and repairing it.
- (2) Where any work is undertaken by the City Engineer pursuant to this subsection the owner or occupier shall reimburse the City for the total cost of the work.
- (3) The City Engineer may, before proceeding with any work, require a deposit in such amount as the City Engineer considers necessary to cover the estimated total cost of the work.

2.19 UNSTOPPING OF SEWER ORDERED BY MEDICAL HEALTH OFFICER

When a building sewer or public sewer connection has become stopped and the Medical Health Officer is of the opinion that the stoppage causes a menace to public health, and the owner of the premises served is unable to furnish the deposit required under Section 2.18 of this By-law or to meet consequent charges for unstopping and repairing, the owner may sign a statement to that effect and agree to have the cost of unstopping and repairing charged against the property and collected as ordinary taxes, and thereupon the City Engineer may carry out such unstopping and repairing, and shall certify the cost thereof and file such certificate, together with the description of the lot, with the Collector of Taxes, and the amount of such

cost shall be inserted in the real-property tax roll with respect to such premises and shall be collected in the same manner as overdue taxes.

2.20 CONNECTIONS TO PUBLIC SEWER ORDERED BY COUNCIL

- (1) The Medical Health Officer may, by notice in writing, require the owner of any premises which are not connected to a public sewer as provided by Section 2.14 of this By-law to connect such premises to such sewer within 30 days of the date of such notice.
- (2) If an owner fails to comply with the notice referred to in Sentence (1), the Medical Health Officer shall report the matter to the City Council who may direct the Inspector to connect the premises forthwith to the public sewer.
- (3) The actual cost of connecting the said premises to the public sewer, including any interest charges and the estimated cost of overhead expenses, shall be certified by the Inspector who shall therewith file such certificate with the Collector of Taxes.
- (4) The Collector of Taxes shall forthwith insert the amount of such cost in the real-property tax roll, and such amount in the case of one and two family dwellings may be payable in 5 equal annual instalments commencing with the next tax roll following certification by the Inspector.
- (5) The said annual instalments shall be deemed in all respects to be taxes levied in respect to the said parcel and shall be recoverable as such.

SECTION 3 -WASTEWATER AND STORM WATER DISCHARGE AND QUALITY STANDARDS

3.1 STANDARDS FOR WASTEWATER DISCHARGES

- (1) No person shall cause or permit any storm water or uncontaminated water to be discharged into a sanitary sewer.
- (2) No person shall, except as provided for in this By-law, dispose of any wastewater except by means of a connection with the City sewer system.
- (3) If no City sewer is available for a wastewater connection the proposed method of disposal must be satisfactory to the Inspector.
- (4) No person shall discharge or permit to be discharged into a sanitary sewer or combined sewer any substance that has any of the following characteristics:

Solids

- (a) any wastewater with particles larger than 0.5 cm in any dimension;
- (b) any wastewater having a suspended solids content of more than 600 milligrams per litre;
- (c) any garbage;

Greases

- (d) any water or waste which contains grease, whether or not emulsified, at a concentration in excess of 150 milligrams per litre or which contains more than 15 milligrams per litre of substances derived from petroleum sources;

Acids and Alkalis

- (e) any soluble waste or wastewater having a pH lower than 5.5 or higher than 10.5;

Temperature

- (f) any liquid or vapour having a temperature higher than 65° C;

Toxic Substances

- (g) any water or waste that will by itself or with other water or waste in the sewerage system, will release noxious gases, or form solids in excess of 600 milligrams per litre or create any other conditions deleterious to structures or treatment processes; or
- (h) any substance in a combined or uncombined form with a concentration in excess of the levels set out in Table 1.

TABLE 1

MATTER (Toxic Substances)	Expressed As	Concentrations in Milligrams per Litre
Aluminium	Al	50.0
Arsenic	As	1.0

Barium	Ba	5.0
Boron	B	50.0
Cadmium	Cd	0.2
Chloride	Cl	1500.0
Chlorinated Phenols*		0.05
Chromium	Cr	4.0
Cobalt	Co	5.0
Copper	Cu	2.0
Cyanide	CN	1.0
Fluoride	F	10.0
Iron	Fe	10.0
Lead	Pb	1.0
Manganese	Mn	5.0
Mercury	Hg	0.05
Molybdenum	Mo	1.0
Nickel	Ni	2.0
Phenolic Compounds		1.0
Silver	Ag	1.0
Sulphate	SO ₄	1500.0
Sulphide	S ⁻	1.0
Tin	Sn	5.0
Zinc	Zn	3.0

* Chlorinated Phenols are the total of 2,3,4,5 and 2,3,4,6 tetrachlorophenols and pentachlorophenols.

3.2 STANDARDS FOR STORM WATER DISCHARGES

- (1) No person shall cause or permit contaminated water or wastewater to be discharged to a storm sewer.
- (2) Without limiting the generality of Sentence (1), no person shall, directly or indirectly, place or discharge or cause to be placed or discharged into the storm drainage system or any watercourse any water or waste having the following characteristics:

Solids

- (a) water or waste having a total suspended solids content of more than 75 milligrams per litre;

Grease

- (b) water or waste containing grease in a concentration more than 15 milligrams per litre;

Acids and Alkalis

- (c) waste which prior to the discharge into a storm sewer or watercourse, has a pH lower than 6.0 or higher than 9.0;

Chemical Wastes

- (d) chemicals, chemical residues, paint, paint residues;
- (e) pesticides;
- (f) water or waste from steam plants or heating systems except water that has not been treated with chemicals;
- (g) water or waste from air conditioning systems, cooling systems or refrigeration systems except water that has not been treated with chemicals;
- (h) water from a pool containing residual bromine, chlorine or chloramine;
- (i) water from a waterworks containing residual chlorine remaining from the disinfection of any part of the waterworks, but does not include water containing chlorine ordinarily added to a supply of potable water by the City of Vancouver or the Greater Vancouver Water District;

Temperature

- (j) liquid or vapours having a temperature higher than 40° C to any storm drainage system;

Animal Wastes

- (k) animal excrements;
- (l) wastewater from the washing of kennels stalls, pet hospitals or clinics;

Contaminated Sites

- (m) water or waste from a site declared contaminated by the Ministry of Environment, Lands and Parks under the British Columbia *Waste Management Act*, unless otherwise permitted by the Inspector in writing;

Others

- (n) domestic wastewater including but not limited to wastewater from recreational vehicles, septic tanks and portable toilets;
- (o) trucked wastes;
- (p) any deleterious substances as defined in Section 3.4 of the Canada *Fisheries Act*.

3.3 PROHIBITED DISCHARGES

- (1) No person shall place or discharge or cause to be placed or discharged into the sewerage system, the storm drainage system, or any watercourse any of the following:

Explosives and Flammable Substances

- (a) any flammable or explosive liquid, solid or gas including but not limited to gasoline, benzene, naphtha, alcohol and propane;
- (b) any substance that is water reactive or by interaction with other wastes will cause an explosion, generate flammable gases or support combustion, including but not limited to calcium carbide, sodium and oxidizers;

Poisonous and Infectious Substances

- (c) any water or waste containing a toxic, poisonous or infectious substance in sufficient quantity to injure or interfere with any sewage treatment process, to constitute a hazard to humans or animals, or to create any hazard to the receiving waters or storm water overflows or the effluent of the sewage treatment plant;
- (d) any pesticides, herbicides or fungicides;

Corrosive and Noxious Substances

- (e) any gases, liquids, or solids including but not limited to corrosive, noxious or malodorous materials which either by themselves or by interaction with other wastes are capable of
 - (i) creating a public nuisance,
 - (ii) causing a hazard to life or damage to property or the environment,
 - (iii) becoming a health or safety hazard to personnel operating or maintaining the sewerage system,
 - (iv) causing damage to the sewerage system, or
 - (v) interfering with any sewage treatment process;

Radioactive Substances

- (f) any radioactive material except within such limits as are permitted by the license issued by the Atomic Energy Control Board of Canada;

Special Wastes

- (g) any special waste as defined in the British Columbia *Waste Management Act*;

High Temperature Wastes

- (h) any material that will react with water that will create heat in amounts which will interfere with the operation and maintenance of sewerage system and storm drainage system or exceed the temperature limits in Clauses 3.1(4) (f) and 3.2(2)(j);

Trucked Wastes

- (i) any material from a cesspool, septic tank or sewage holding tank, including those in recreational vehicles, or any trucked wastes except at facilities approved by the Inspector;

Dyes

- (j) any dyes except those approved by the City Engineer or where permission has been granted by the Inspector;

Obstructive Wastes

- (k) any substance which may solidify or become discernibly viscous at temperatures above 0° C;
 - (l) any substance which will solidify or become discernibly viscous when it reacts with water.
- (3) No person shall cause or permit any storm water or uncontaminated water to be discharged to a sanitary sewer.

3.4 ACCIDENTAL DISCHARGES

- (1) A person who accidentally discharges prohibited substances into a public or private sewerage system, storm drainage system or watercourse must report the incident to the Inspector or the City Engineer.
- (2) Any person handling or storing chemicals, chemical wastes or substances or materials identified in Subsection 3.3 must
 - (a) handle or store them in such a manner as to prevent the leakage or discharge of these chemicals, substances or materials from entering the sewerage system, drainage system, waterways or onto any land that will run, drain, seep or otherwise be discharged into the sewerage system, drainage system or any waterway,
 - (b) when required by the Inspector or the Fire Chief, construct containment barriers of sufficient height to contain the volume of material stored in the largest tank and of a type and design approved by the Inspector or the Fire Chief,

- (c) when required by the Inspector, install a shut-off valve on the outlet of the storm sump so that in an emergency the escape of prohibited wastes can be prevented from entering the sewerage or drainage systems, and
- (d) in the event of a spill, turn off the shut-off valve on the outlet of the storm sump to prevent the escape of prohibited wastes into the sewer.

SECTION 4 - INDUSTRIAL, INSTITUTIONAL AND COMMERCIAL REQUIREMENTS

4.1 WASTEWATER TREATMENT FACILITIES

- (1) Any industrial wastewater likely to damage or increase maintenance to the storm drainage system or the sewerage system, likely to detrimentally affect the sewage treatment plant, or likely to contaminate surface or sub-surface waters, must be pretreated to render it innocuous prior to discharge into a public sewer.
- (2) Plans and reports showing details pertaining to the treatment process or processes, capacity, location, materials, equipment, methods of construction or any other information required by the Inspector must be submitted to the Inspector for approval before any portion of the treatment facility is installed.
- (3) All wastewater treatment facilities must be serviced and maintained so that the facilities are working to the design specifications.
- (4) All wastewater treatment facilities must be kept clear of obstructions so as to provide immediate access for inspection purposes.

4.2 GENERAL REQUIREMENTS FOR CONNECTING TO THE PUBLIC SEWERAGE SYSTEM

- (1) The Inspector may require the owner or occupier of premises upon which an industrial, institutional or commercial activity is proposed or carried on who wishes to discharge or discharges industrial wastewater to the sewerage system to submit plans and reports to the Inspector.
- (2) The plans and reports referred to in Sentence (1) must be satisfactory to the Inspector who may require the following information:
 - (a) proposed or existing operations or processes where wastewater is generated;
 - (b) daily volumes and peak discharges;

- (c) type of waste to be processed or discharged;
- (d) anticipated biochemical oxygen demand and the amount of suspended solids or grease;
- (e) pH factor and temperature of the wastewater;
- (f) toxic chemicals contained in the wastewater;
- (g) proposed method of pretreatment;
- (h) flow equalizing or mixing facilities;
- (i) location of sampling manhole;
- (j) monitoring equipment; and
- (k) any other information requested by the Inspector.

4.3 VOLUME CONTROL

- (1) The City Engineer may set flow volume limits on wastewater discharged to the sewerage system or flow volumes limits on uncontaminated water discharged to the storm drainage system
- (2) The owner or occupier of premises from which wastewater is discharged into the sewerage system must ensure that the discharges do not exceed the limits on flow volumes set by the City Engineer.
- (3) Equipment necessary to comply with Sentence (2) must be provided, maintained and operated by the owner or occupier of the premises in a manner satisfactory to the City Engineer.

4.4 SPECIAL CONTROL MANHOLES FOR INDUSTRIAL WASTES

- (1) Where industrial wastewater is discharged to the public sewerage system, the owner or occupier of the premises must install and keep maintained a control manhole suitable for the inspection and sampling of the discharged wastes.
- (2) Plans showing the design and location of the control manhole must be submitted to the Inspector for approval prior to installing the works.
- (3) The control manhole must be accessible at all times to the Inspector.

- (4) All industrial wastewater discharged to public sewers must pass through a control manhole before being discharged into the public sewerage system.
- (5) Where installation of a control manhole is not possible, an alternative device or facility may be provided if approved by the Inspector.

4.5 MONITORING OF INDUSTRIAL WASTEWATER

- (1) The Inspector may require the owner or occupier of a premises to provide results of an analysis of any discharges from the premises to the sewerage system, storm drainage system or watercourse to demonstrate compliance with this By-law.
- (2) Should any testing of wastewater or storm water show that it is not in compliance with this By-law, the Inspector, in addition to any other provision of this By-law, may direct the owner or occupier to so comply with the By-law and may, in addition, direct the owner at the owner's expense to install such automatic monitoring and recording equipment as the Inspector deems necessary or establish a regular testing program and to supply the results of such monitoring to the Inspector.
- (3) All tests, measurements, analyses and examinations of wastewater, its characteristics or contents must be carried out in accordance with Standard Methods.

4.6 CONTROL OF WASTE DISPOSAL

- (1) The Inspector may at any time require a person who stores wastes of liquid or solid nature to show proof that these wastes are being stored in a manner which is acceptable to the Inspector, and the Inspector may also require information on the method of packaging and storing of the waste.
- (2) The Inspector may at any time require a person who disposes of wastes of liquid or solid nature to show proof that these wastes are being disposed of in a place and manner which is acceptable to the Inspector, and the Inspector may also require information on the method of packaging and transporting of the waste.
- (3) The Inspector may require a person to provide an analysis, prepared by a qualified chemist, of the waste referred to in Sentences (1) and (2).

4.7 CONTAMINATED GROUNDWATER DISCHARGE FEES

Where groundwater that requires remediation under the British Columbia *Waste Management Act* is intended to be discharged into a sanitary system or a combined sewer, the fee set out in Part II of Schedule A must first be paid to the City for the volume discharged.

4.8 SHIP WASTEWATER DISPOSAL FEES

Where a ship or other water craft desires to dispose of wastewater by depositing it into the sewerage system, the fee set out in Part II of Schedule A must first be paid to the City for the volume discharged.

4.9 FEE FOR DISCHARGES BY UTILITIES

Where groundwater is being discharged into a combined sewer by a utility company from a system that is not owned by the City but is located within a street or other public property, an annual charge as set out in Part II of Schedule A must be paid by the utility to the City.

SECTION 5 - FLAMMABLE AND COMBUSTIBLE LIQUIDS

5.1 CONTROL OF SPILLS OR LEAKS

Emergency Spill Sumps and Storage Tank Measurements

- (1) Service stations constructed after February 12, 1980 and any other fuel dispensing operations which are not service stations but where spills of flammable or combustible liquids may occur in an area which drains to the sewerage or storm drainage systems must be provided with an emergency spill sump that is designed and installed so that a minimum of 1,000 litres of the spill will be trapped.
- (2) All spills of flammable or combustible liquids must be immediately removed from the emergency spill sump by the owner or operator of the premises.
- (3) The outlet pipe of the emergency spill sump must be designed and constructed so as to be readily capped off in an emergency to prevent the escape of liquids to the sewer.
- (4) To facilitate early detection of underground leaks, the operators of service stations and other dispensary facilities having underground storage tanks for flammable liquids must
 - (a) ensure that the storage tanks are gauged or dipped, including water dips, at least daily, when the premises are in operation,
 - (b) maintain a record for each storage tank to provide a permanent record of gauge or dip readings and water dip readings,

- (c) reconcile gauge or dip readings with deliveries of flammable or combustible liquid and sales meter readings daily and maintain a record of these comparisons,
 - (d) when the reconciliation required by Clause (c) definitely determines that a loss of flammable or combustible liquids is taking place, or when the water dip exceeds 5 cm, the owner must take immediate corrective action and notify the Fire Chief within 24 hours, and
 - (e) retain and keep available on the premises for inspection by the Inspector or Fire Chief all gauge or dip records and all reconciliation records described in Clause (c) for at least 2 years.
- (6) The Inspector or the Fire Chief may require one or more monitoring shafts to be installed in the vicinity of all underground tanks.
 - (7) Monitoring shafts must be installed by the owner within 24 hours of the time the order is given and must meet the specifications of the Inspector or the Fire Chief.
 - (8) Water from storage tanks containing flammable or combustible liquids must not be discharged directly or indirectly to City sewers.

5.2 PREVENTATIVE STEPS

- (1) The Inspector or the Fire Chief may order the use of the pumps to be discontinued on any dispensing system suspected of leaking.
- (2) Every storage tank must be tested for leakage whenever a leak is suspected or when requested by the Inspector, in conformance with the Vancouver Fire By-law.
- (3) The Inspector or the Fire Chief may order the immediate removal of flammable or combustible liquids stored in any underground tank suspected of leaking when an approved pressure test cannot be immediately performed on the tank and related piping.
- (4) Leaking systems must be repaired before being returned to service, and all reasonable steps must be taken to recover escaped liquid and to remediate contaminated soil.

5.3 REMOVAL OF UNDERGROUND TANKS

When underground storage tanks will not be reused, or have been out of service for 2 years, whichever comes first, the owner must

- (a) notify the Fire Chief in writing,
- (b) remove flammable and combustible liquids from the storage tanks, connecting piping and dispensing equipment,
- (c) purge storage tanks of flammable or explosive vapours and remove the tanks from the ground,
- (d) remove the piping from the ground or purge it of flammable liquids and vapours and permanently seal the ends of the piping by capping or plugging,
- (e) replace with clean fill, in a manner acceptable to the Inspector, the soil around and under the storage tank which is contaminated with flammable or combustible liquid.

SECTION 6 - PROTECTION OF PUBLIC HEALTH, THE ENVIRONMENT AND THE PUBLIC SEWERAGE AND DRAINAGE SYSTEMS

6.1 STREAM OBSTRUCTION

No person shall obstruct any stream, creek, watercourse, surface drain or sewer by trees, brushwood, timber, refuse or other material.

6.2 DISCONNECTION OF SEWERS AND OTHER REMEDIAL ACTIONS

- (1) Where a discharge to a sewerage system, a storm drainage system or watercourse
 - (a) is hazardous or creates an immediate danger to any person, or animal or the environment, or
 - (b) endangers or interferes with the operation of a sewerage system, a storm drainage system or a sewage treatment plant,

the City Engineer or the Inspector may, in addition to any action provided for in this By-law, disconnect, plug or seal off the sewer line discharging the unacceptable liquid or take such other action as is necessary to prevent such discharge from entering the sewerage system, the storm drainage system or the watercourse.

- (2) The City Engineer or the Inspector may prevent the unacceptable discharge described in Sentence (1) from entering into a sewerage system, a storm drainage system or watercourse until evidence satisfactory to the City Engineer has been provided to ensure that no further discharge will be made to the sewerage system, storm drainage system or watercourse.

- (3) The owner or occupier of the land from which the discharge described in Sentence (1) is emanating must pay the costs incurred by the City in taking action to remediate any damage caused by the discharge.
- (4) The sewer disconnected, plugged or sealed off pursuant to Sentence (1), will not be reconnected by the City Engineer until the costs set out in Sentence (3) are paid to the City.

SECTION 7 - OFFENCES AND PENALTIES

7.1 OFFENCES

- (1) Every person who violates any of the provisions of this By-law or who suffers or permits any act of thing to be done in contravention of in violation of any of the provisions of this By-law, or who neglects to do or refrains from doing anything required to be done by any of the provisions of this By-law, or who does any act which violates any of the provisions of this By-law is guilty of an offence against this By-law and liable to the penalties hereby imposed.
- (2) Each day that a violation is permitted to exist shall constitute a separate offence.

7.2 PENALTIES

- (1) Every person who commits an offence against this By-law is liable to a fine and penalty of not less than \$200.00 or more than \$10,000.00 for each offence or, in the alternative, to imprisonment for any period not exceeding two months.
- (2) Every person who commits an offence of a continuing nature is liable to a fine not exceeding \$50.00 for each day such offence is continued.

8. REPEALS

By-laws No. 2884, 5320 and 5964 are repealed.

9. This By-law shall come into force and take effect on 31 October 1999.

DONE AND PASSED in open Council this 19th day of October
1999.


Mayor


City Clerk

SCHEDULE A

SCALE OF FEES

I - SEWER CONNECTIONS

Every applicant for a public sewer connection must, at the time of application, pay to the City the fees set out hereunder:

1. Public sewer connection, for a One and Two Family Dwelling \$4,400.00
2. Public sewer connection, other than One or Two Family Dwellings:
 - a) 4 inch/100 mm diameter \$ 5,750.00
 - b) 6 inch/150 mm diameter 6,940.00
 - c) 8 inch/200 mm diameter 7,850.00
 - d) 10 inch/250 mm diameter 9,060.00
 - e) 12 inch/300 mm diameter 10,300.00
 - f) 15 inch/375 mm diameter 11,510.00
 - g) greater than 15 inch/375 mm diameter pursuant to Sentence 2.7(2)
 - h) manhole installation in conjunction with
a public sewer connection 3,460.00
3. Where a public sewer connection will be placed more than 5 feet below the ground elevation, taken to the nearest foot and measured at the centre line of the street or lane as determined by the City Engineer, the fees payable shall be an amount equivalent to an increase of 10%, for each additional foot below 5 feet, of the fee otherwise payable by section 1 or 2 above.
4. New fitting on a twin sewer pursuant to Sentence 2.7(4) \$2,130.00
5. New fitting on a single sewer pursuant to Sentence 2.7(4) \$ 930.00
6. Inspection of a plumbing system, subsoil drainage pipes and
a building sewer \$ 130.00

II - DISCHARGES AND DISPOSALS

Every applicant for the discharge or disposal of wastewater or groundwater must pay to the City the following fees:

1. For the discharge of contaminated groundwater pursuant to Section 4.7
(per cubic metre) 0.50
2. For the disposal of ship wastewater pursuant to Section 4.8
(per cubic metre) 0.50
3. For discharges by Utilities pursuant to Section 4.9
(per manhole connected) 100.00 per year