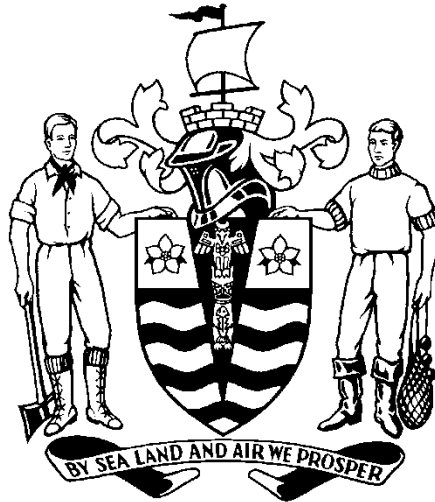


CITY OF VANCOUVER BRITISH COLUMBIA



SEWER AND WATERCOURSE BY-LAW NO. 8093

**This By-law is printed under and
by authority of the Council of
the City of Vancouver**

**(Consolidated for convenience only
to December 10, 2024)**

BY-LAW NO. 8093

**A By-law to Set Sewer Utility Rates
and to Regulate the Disposal of Wastewater
and Storm Water and the Use of Watercourses
within the City of Vancouver**

**(Consolidated for convenience only
amended to include By-law No. 14204
effective January 1, 2025)**

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 "Sewer 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.
- (4) This By-law also provides for the collection of certain sewer rates to be applied towards a separately administered "Sewer Utility" account.

1.2 DEFINITIONS

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

"approved" means accepted by the Inspector;

"assessment roll" has the meaning set out in the *Assessment Act*;

"authorized agent, acting on behalf of an owner" includes a person who represents to the City in writing that he or she is a member of the board of directors, strata council, management company or other entity reasonably likely to have control and administrative responsibility for the matters governed by this By-law on behalf of the owner;

"Average TSS Load" is to be calculated in cubic metres per operating day over a period of a quarter;

"Average BOD Load" is to be calculated in cubic metres per operating day over a period of a quarter;

"Biochemical Oxygen Demand" or "BOD" means the quantity of molecular oxygen,

expressed in milligrams per litre, used in the biochemical degradation of organic matter and to oxidize inorganic material during a 5-day incubation period at 20 degrees Centigrade, as determined by the appropriate procedure in Standard Methods;

"BOD Load" means the number of kilograms of BOD in industrial wastewater, after multiplying the number of litres of industrial wastewater discharged by the number of kilograms per litre indicated by the BOD;

"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;

"Collector" means the Director of Finance of the City or an authorized representative of the Director of Finance;

"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 site" means an area of land in which the soil or underlying groundwater or sediment contains a hazardous waste or prescribed substance in any quantities or concentrations exceeding provincial risk based or numerical criteria, standards, or conditions.

"contaminated water" means water containing any substance in a concentration that:

- (a) injures or is capable of impairing the health or safety of a person or the environment;
- (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;
- (e) damages or is capable of damaging the environment;
- (f) exceeds the numerical aquatic use standards in the Contaminated Sites Regulation of the Environmental Management Act;
- (g) exceeds aquatic life or aquatic life water quality standards contained in applicable protocols, policies or guidance issued by the British Columbia Ministry of the Environment; or

- (h) exceeds the Wastewater and Storm Water Discharge and Quality Standards in Section 3

"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;

"Flow" means the volume of industrial wastewater discharged, inclusive of all BOD Load and TSS Load, as determined by the City Engineer in accordance with the Standard Methods, the waste discharge permit, and the GVS&DD By-law;

"garbage" means solid waste;

"general taxes" means those taxes levied by the City pursuant to rating by-laws enacted by the City from time to time pursuant to Section 373 of the *Vancouver Charter*;

"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;

"GVS&DD" means the Greater Vancouver Sewerage and Drainage District;

"GVS&DD sewage facility" means works owned by the GVS&DD or otherwise under the control or jurisdiction of the GVS&DD, that gathers, treats, transports, stores, utilizes or discharges wastewater;

"GVS&DD By-law" means the Greater Vancouver Sewerage and Drainage District Sewer Use Bylaw No. 299, 2007, as amended from time to time;

"hazardous waste" means hazardous waste as defined in the Hazardous Waste Regulation of the Environmental Management Act.

"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;

"infill single detached house" means, for the purposes of this By-law, a building consisting of one dwelling unit on a site already containing an existing building which is retained, but does not include a laneway house;

"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 carry out inspections for the purposes set out in this By-law;

"laneway house" means a detached dwelling unit constructed in the rear yard of a site on which is situated a single detached house or a single detached house with secondary suite;

"meter" includes a

- (a) water meter or other flow-measuring device installed in the water service pipe of a property, and
- (b) effluent meter, wastewater meter, or other flow-measuring device installed in the plumbing system of a property;

"metered property" means a property having one or more meters, and "unmetered property" means the property does not have a meter which has been authorized and installed pursuant to this By-law or the *Water Works By-law*;

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

"occupier" means a person who, if a trespass has occurred, is entitled to maintain an action for trespass and includes a person in possession of land, owned by or on behalf of the City or any other person who is exempt from tax and that is held by the occupier under a lease, licence, agreement for sale, accepted application to purchase, easement or other record from the City or any other person who is exempt from tax;

"operating day" means any day during which the waste discharge permit user has discharged any industrial wastewater into the public sewer system, except where the Inspector or City Engineer determines that a waste discharge permit user has discharged any industrial wastewater into the public sewer system for the dominant purpose of reducing that waste discharge permit user's "Average BOD Load", or "Average TSS Load";

"Owner" of land means the registered owner of an estate in fee simple, and also includes

- (a) the tenant for life under a registered life estate,
- (b) the registered holder of the last registered agreement for sale,
- (c) the registered tenant of land under a strata lot lease pursuant to Part 12 of the *Strata Property Act*,

and in dealings with the City, also means the authorized agent, acting on behalf of an owner;

"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;

"prescribed substance" means a substance with a remediation standard prescribed in the Contaminated Sites Regulation of the Environmental Management Act.

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

"Professional Engineer" means a person who is registered or licensed to practise as a professional engineer under the *Engineers and Geoscientists Act*;

"property" means real property, whether residential or non-residential, and includes real property composed of one or more parcels upon which any building or group of buildings may be located and includes real property with one or more buildings under common ownership or management;

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

"rate" or "rates" includes any levy, charge or other fee or tax authorized by Section 302 of the *Vancouver Charter*;

"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;

"service pipe" means the City-owned pipe and appurtenant fittings, either on a street or within an easement, intended to carry water from the City's water main to the farthest downstream City-installed fitting, with City ownership extending to the downstream face of the City fitting, such face to be located, unless otherwise approved by the Engineer pursuant to this By-law, no less than 0.3 metre and no more than 1.0 metre from (a) the property line on City property, or (b) the boundary of an easement within such easement, or (c) the outside face of an "area" within the meaning of the *Area By-law*;

"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;

"shut off" or "to shut off" means to cut off the water supply by closing a City-owned valve or by such other means as the City Engineer may find appropriate;

"Standard Methods" means in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", jointly prepared and published from time to time by the American Public Health Association, American Water Works Association and the Water Environment Federation or any successors thereto;

"single detached houses and duplexes" means, for the purposes of this By-law, any of the dwelling types listed in Part III of Schedule A to this By-law, but for further certainty, excludes "Parking Lot/Garden";

"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 which either floats on the surface or is suspended in wastewater and that is separable by the appropriate procedure described in "Standard Methods";

"tax roll" means the real-property tax roll described in Sections 400, 401 and 401A of the *Vancouver Charter*;

"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;

"TSS" means the concentration of suspended solids contained in wastewater, as measured under standard laboratory procedures, expressed in kilograms per litre, as determined by the City Engineer in accordance with the Standard Methods, the waste discharge permit, and the GVS&DD By-law;

"TSS Load" means the number of kilograms of TSS in industrial wastewater after multiplying the number of litres of industrial wastewater discharged by the number of kilograms per litre indicated by the TSS;

"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;

"waste discharge permit user" means an owner or occupier of property, which, because of the type or volume of industrial wastewater which is discharged from the property, requires a waste discharge permit, under the GVS&DD By-law;

"waste discharge permit" means a waste discharge permit issued or required to be issued by the GVS&DD, in order to permit a person to discharge certain types and volumes of industrial wastewater in compliance with the GVS&DD By-law;

"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; and

"water metered property" means a metered property served by one or more water meters and includes any property having a water meter installed pursuant to the *Water Works By-law*.

1.3 SPECIAL DEFINITIONS FOR SEWER UTILITY RATES

In addition to the defined terms set out in Section 1.2 of this By-law, the defined terms set out in Part II of Schedule A and Part I of Schedule B apply to this By-law, unless the context otherwise requires.

1.4 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.

1.5 NOTICES AND ORDERS

The Inspector or City Engineer, or other employee of the City, may issue in writing such notices or orders as may be necessary to notify a person of a contravention of this By-law, in the manner set out in this By-law.

1.6 SCOPE OF ORDER

The Inspector or City Engineer, or other employee of the City, may order a person who contravenes any provision of this By-law:

- (a) to carry out any work or do anything required by this By-law or any permit within a specified time; or
- (b) to discontinue or refrain from proceeding with any work or doing anything that is in contravention of this By-law.

1.7 SERVICE OF ORDER

A notice or order issued under this By-law is sufficiently served if:

- (a) the notice or order is delivered by hand, by ordinary prepaid mail or by registered mail, to the owner or occupier at the applicable address as shown in the records of the Assessment Authority of British Columbia; or
- (b) in the case of an owner or occupier that is a corporation, the notice or order is delivered by hand, by ordinary prepaid mail, or by registered mail, to the registered and records office of the corporation; or
- (c) the notice or order is posted on the affected property or premises.

1.8 DEEMED RECEIPT OF ORDER

Notices and orders issued in accordance with this By-law are deemed to have been received:

- (a) four days after mailing, if sent by ordinary prepaid mail, to the mailing address of the owner or occupier;
- (b) on the date of delivery as noted in the Canada Post tracking system, if sent by registered mail; and
- (c) immediately upon receipt, if handed to the owner or occupier or to a representative of the owner or occupier, delivered to the registered and records office for the owner or occupier, or posted on the affected property or premises.

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 \$255,000, and the work involves:
 - (i) the addition of a dwelling unit, or
 - (ii) the enlargement of, or a change of use within, an existing commercial space that is expected to increase demand upon the existing sewer system.

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 REQUIRED FOR EACH PARCEL

- (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 strata lots, 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 City's 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 Part I of Schedule A to this By-law, which Schedule is attached to and forms part of this By-law.
- (2) Despite the provisions of Section 2.7(1) of this By-Law, if, in the opinion of the Engineer, the installation cost of a public sewer connection to a building sewer is or will be greater than 1.5 times the applicable flat rate connection fee set out in Schedule A, Part I, Section 2:
 - (a) the installation must be billed to the customer on an “at cost” basis;
 - (b) the cost of the “at cost” installation must include the amount expended by the City for gross wages and salaries, employee fringe benefits, materials, equipment rentals at rates paid by the City or set by the City for its own equipment, and any other expenditures incurred in doing the work, plus administration charges;
 - (c) the Engineer may supply an estimate of the installation cost;
 - (d) the Engineer may require advance payment prior to commencement of the work;
 - (e) In the event that the Engineer requires advance payment, such advance payment must be based on an estimate of installation cost made by the Engineer;
 - (f) in the event that the actual installation cost is different than the estimated cost, the Engineer must bill any additional cost to the customer, and must credit any surplus to the customer’s account; and
 - (g) in the event that the actual installation cost is 1.5 times the applicable flat rate connection fee or less, the Engineer must apply the applicable flat rate connection fee and must credit any surplus to the customers’ account.
- (3) Where a public sewer connection will have a diameter of more than 150 mm, the City Engineer may require the installation of a maintenance hole, in which case, the fee payable in respect of the maintenance hole requirement (in addition to all other amounts payable under this By-law in respect of the public sewer connection) shall be the total cost of the maintenance hole including all costs of and incidental to the installation thereof, 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.
- (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 a permit has been issued but the City has not yet commenced the work specified by the permit, a permit holder may apply in writing to the City Engineer for cancellation of the permit and a refund of a portion of the fees paid, and where the City Engineer recommends the refund and certifies that the work has not been commenced and the permit has been cancelled, the Collector may refund to the permit holder such part of the fees paid as is recommended by the City Engineer, except that the refund may not include any portion of the non-refundable application fee paid.
- (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

- (1.1) Upon application, the City Engineer may approve the use of an existing public sewer connection if the sewer connection is:
 - (a) sized adequately;
 - (b) not a combined connection;
 - (c) made of PVC or, if the sewer connection is larger than 375 mm, of concrete;
 - (d) in good condition and the City Engineer is satisfied that it is suitable for continued use; and
 - (e) meets all of the other requirements of this By-law.
- (1.2) When applying for the use of an existing public sewer connection under Sentence (1.1) above, the applicant must provide a video inspection and associated inspection report from a PACP/LACP certified contractor for the City Engineer's review in order for the City Engineer to verify the condition of the sewer connection, and if the City Engineer determines that the connection contains defects or deficiencies, the sewer connection may be deemed unsuitable.
- (2) The fee, including inspection, for the approval referred to in Sentence (1.1) will be:
 - (a) an amount equal to the connection fee set out in Part I of Schedule A to this By-law if the City has installed the existing public sewer connection referred to in

Sentence (1.1) but has not received payment previously of an amount equal to the connection fee then payable for that existing public sewer connection; or

- (b) an amount equal to 20% of the connection fee set out in Part I of Schedule A to this By-law if the City has installed the existing public sewer connection referred to in Sentence (1.1) and has received payment previously of an amount equal to the connection fee then payable for that existing public sewer connection.
- (3) In the case of single detached houses and duplexes, 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 or improve the system performance or operation by providing a public sewer connection at an alternate or higher location or by separating the sewers, a property owner must, at the request of the City Engineer, make any changes in plumbing necessary to connect to the new service or services, 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 solids have been installed to the satisfaction of the Inspector or the City Engineer. For the purposes of this Section 2.17, "solids" means any substances which exceed the maximum size and concentration limits set out in Clauses 3.1(4)(a) and 3.1(4)(b) of this By-law.

2.18 UNSTOPPING SEWER ON REQUEST

- (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 Section 2.18 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 Sentence 2.18(3) of this By-law or to pay the costs of 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 the City Engineer or Inspector may then carry out such unstopping and repairing, and certify the cost of such work and file such certificate, together with the description of the lot, with the Collector, and such cost will be inserted on the tax roll for such property and may be collected in the same manner as overdue general 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 is not connected to a public sewer as provided by Section 2.3 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 will report the matter to the City Council who may direct the Inspector or City Engineer to immediately connect the premises to the public sewer.
- (3) The actual cost of connecting such premises to the public sewer, including any interest charges and the estimated cost of overhead expenses, will be certified by the Inspector or City Engineer who will then file such certificate with the Collector.
- (4) The Collector will then insert the amount of such cost on the tax roll, and such amount in the case of single detached houses and duplexes may be payable in 5 equal annual instalments commencing with the next tax roll following such certification by the Inspector or City Engineer.
- (5) The said annual instalments will be deemed in all respects to be taxes levied in respect to such premises and will 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) Except to the extent expressly permitted by a waste discharge permit issued under the *GVS & DD By-law*, 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, by itself or with other water or waste in the sewerage system, will release noxious gases, or form suspended solids in excess of the concentrations permitted under Clause 3.1(4)(b) of this By-law 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. All concentrations in Table 1 are expressed as total concentrations which will include both dissolved and undissolved forms of such substances.

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 ₂	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) contaminated water or wastewater 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 34(1) 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 hazardous waste;

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.
- (2) 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 any prohibited substances listed in Section 3.3, into a public or private sewerage system, storm drainage system or watercourse must immediately report the incident to the Inspector or City Engineer.

- (2) Any person handling or storing chemicals, chemical wastes or substances or materials identified in Section 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 maintenance hole;
- (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 MAINTENANCE HOLES 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 maintenance hole suitable for the inspection and sampling of the discharged wastes.
- (2) Plans showing the design and location of the control maintenance hole must be submitted to the Inspector for approval prior to installing the works.
- (3) The control maintenance hole must be accessible at all times to the Inspector.
- (4) All industrial wastewater discharged to public sewers must pass through a control maintenance hole before being discharged into the public sewerage system.
- (5) Where installation of a control maintenance hole 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).

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 facilities 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 groundwater monitoring wells to be installed in the vicinity of all underground tanks.
- (7) 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 - SEWER USE RATES, BILLING AND COLLECTION

7.1 SEWER UTILITY RATES - GENERAL

Nothing in this Section 7.1 forms part of the legal text of this By-law and is for general information purposes only. For the purposes of this By-law, it has been estimated that on average, approximately 85% of the water supplied by the City to most properties is discharged into the public sewer system. Accordingly, the water-consumption based sewer rates set out in

Schedule A to this By-law have been calculated on the basis that an estimated 15% of such water consumption does not enter the public sewer system.

7.2 UNMETERED PROPERTY

(1) Flat Rates for Unmetered Property

For each unmetered property which is served by a plumbing system which is connected directly or indirectly to a public sewer connection the owner and occupier of such property will pay, in each calendar year, the applicable rate set out in Part III of Schedule A of this By-law on account of the wastewater discharged into the public sewer connection which rate will be in addition to any other rates payable pursuant to this By-law or the *Water Works By-law*.

(2) Unmetered Property - Entry of Rates on Tax Roll

- (a) The rate for each unmetered property will be entered by the Collector on the tax roll of the City for each year against each property to which the unmetered property rates apply, except to the extent to which a property is by law exempt from such rate.
- (b) Where a property is by law exempt from the rate payable pursuant to this Section 7.2, but the occupier is not, then such rate including all related interest, penalties and other charges will be due and payable by the occupier of the property in the same manner as though such rate had been entered on the tax roll and been subject to the interest, penalties and other charges set out in Sentence 7.2(4).

(3) Due Dates/Change of Use

- (a) Subject to Sentence (b), the rates payable pursuant to Part III of Schedule A and this Section 7.2 of this By-law are due and payable in advance on January 1 of each calendar year to which the rate applies or, at the Collector's option, upon any later date or dates which may be set out on a bill or series of bills issued by the Collector.
- (b) Despite Sentence (a),
 - (i) in the case of any property to which such rates did not previously apply, the owner and occupier are liable to pay such rates in respect only to the period which commences on
 - (A) where the provisions of Schedule B - *Flat Service Charges for Residential Properties* of the *Water Works By-law* apply to such property, the date on which the rates set out in Schedule B - *Flat Service Charges for Residential Properties* of the *Water Works By-law* begin to apply to such property, and
 - (B) in any other case, the date on which the plumbing system which is connected directly or indirectly to a public sewer connection became so connected,

- (ii) where a water meter has been required to be installed pursuant to the *Water Works By-law*, the owner and occupier will not be liable to pay the rates under this Section 7.2 in respect to the period of time commencing on the date the owner and occupier become liable to pay the rates for metered property pursuant to Section 7.3 and Part V of Schedule A of this By-law,
- (iii) where a water service pipe is shut off pursuant to the *Water Works By-law* for more than 90 days, the owner and occupier will starting 90 days after the water service pipe was shut off be liable to pay (in respect only to that shut off water service pipe) the rates set out in Part IV of Schedule A of this By-law for "Turned Off, 1 Service", "Turned Off, 2 Services" or "Turned Off, 3 Services" as the case may be, in lieu of the rate previously applicable to such water service pipe on that property under Part IV of Schedule A of this By-law,

and in each case the rates payable under this Section 7.2 in respect of such partial periods are due and payable in advance on the first day of the partial period to which such rate applies or, at the Collector's option, upon any later date or dates which may be set out on a bill or series of bills issued by the Collector. Where any portion of an advance payment relates to a period after which the owner and occupier ceased to be liable to pay such rate under this Section 7.2, the Collector will either apply the balance remaining to any other rate then owing under this or any other By-law, failing which the owner and occupier may apply for a refund of such amount.

(4) Late Payment Interest, Penalties and Other Charges

Where the rates payable pursuant to this Section 7.2 are not paid when due, such unpaid rates will be subject to the same interest, penalties and other charges as are imposed on unpaid and overdue general taxes by By-law for the then current year's general taxes, and the provisions of those By-laws will be deemed to apply to such unpaid rates in the same manner as if such rates were unpaid general taxes.

7.3 WATER METERED PROPERTY

(1) Meter Rates

Subject to Sections 7.3(3), 7.7 and 7.8, for each water metered property which is served by a plumbing system which is connected directly or indirectly to a public sewer connection, the owner and occupier of such property will pay on account of the wastewater discharged into the public sewer connection (and in addition to any other rates payable pursuant to this By-law or the *Water Works By-law*),

- (a) for property without a waste discharge permit user, the "Metered Property Rate" set out in Part V of Schedule A of this By-law multiplied by 85% of the number of units of water delivered to such property,
- (b) for property with a waste discharge permit user, the total of the following amounts:
 - (i) the "Metered Property Rate" set out in Part V of Schedule A of this By-law multiplied by 85% of the number of "net units" of water delivered to

such property, where "net units" means the amount obtained by subtracting the "waste discharge permit units" from the number of units of water delivered to the property, and where "waste discharge permit units" means the "average number of units of industrial wastewater discharged per each calendar day from that property by the waste discharge permit user in the prior calendar year" multiplied by "the number of days in the applicable billing period", where

"average number of units of industrial wastewater discharged per each calendar day from that property by the waste discharge permit user in the prior calendar year" means the total number of units of industrial wastewater discharged by the waste discharge permit user in the prior calendar year divided by the total number of days for which that waste discharge permit user was required to have a waste discharge permit, and

"the number of days in the applicable billing period" means the number of days in the billing interval used to calculate the number of units of water delivered to the property,

plus

- (ii) the "Waste Discharge Permit User Rate" set out in Part V of Schedule A of this By-law multiplied by the "waste discharge permit units" where "waste discharge permit units" means the "waste discharge permit units" calculated pursuant to Clause (i) for the same billing period,

in any given billing period.

(2) Water Metered Property - Calculation and Billing

- (a) *Calculation of Consumption/Discharge* - The consumption and discharge components of the rates payable pursuant to this Section 7.3 and Part V of Schedule A of this By-law will be measured or estimated by the City Engineer as follows:
 - (i) Consumption will be calculated by the City Engineer based on the Inspector=s periodic readings of the water meter for the property.
 - (ii) Discharge volumes for industrial wastewater discharged by a waste discharge permit user will be measured or estimated by the City Engineer pursuant to Section 7.10 and such measured or estimated volume will then be used to calculate the "waste discharge permit units", "net units", and total payable on account of the Waste Discharge Permit User Rate under Clauses 7.3(1)(b) and Sentence 7.3(3)(c) of this By-law.
 - (iii) Where, due to the location of a water meter, a meter reading cannot be obtained or cannot be safely obtained by the Inspector, then the Inspector will mail or deliver a notice to the property, allowing the owner and occupier to remedy the situation within 96 hours of receiving such notice, failing which the Collector or City Engineer may estimate the amount of water which was likely delivered to the property over the relevant period of time and issue a bill based on such estimated consumption.

- (iv) If an Inspector determines that the water meter for a property has malfunctioned, the Collector or City Engineer must estimate the actual water consumption by calculating the previous average water consumption, based on the current years consumption and up to two previous years consumption and must issue an invoice based on that calculation, which invoice must be for no more than twelve months' average water consumption.
 - (v) If an Inspector determines that the water meter for a property is inaccurate due to the removal of a meter or tampering with a meter, the Collector or City Engineer must estimate the actual water consumption by calculating the previous average water consumption, based on the current years consumption and up to two previous years consumption and must issue an invoice based on that calculation, which invoice must be for the entire period during which the meter was removed or tampered with, as determined by the Inspector.
 - (vi) An Inspector may read a water meter at any reasonable time and may, subject to subsections (iii), (iv) and (v) above, certify such readings to the Collector or City Engineer, who may then calculate the amount of water delivered during each interval between such readings.
- (b) *Billing Procedure* - The rates payable pursuant to this Section 7.3 and Part V of Schedule A of this By-law will be calculated and billed by the Collector as follows:
- (i) All rates will be determined on the basis of water delivered to the property in any given billing period.
 - (ii) The Collector will periodically issue bills which state the period of time to which the bill relates and the date when payment is due and payable, which date will be subsequent to the date the bill is mailed.

(3) Water Metered Property - Change of Use

- (a) In the case of any property to which the rates payable under Sentence 7.3(1) did not previously apply, the owner and occupier are liable to pay such rates in respect only to the period which commences on one of the following dates:
- (i) where the provisions of Schedule D - *Consumption Charges For Metered Water Service* of the *Water Works By-law* apply to such property, the date on which the rates set out in Schedule D - *Consumption Charges For Metered Water Service* of the *Water Works By-law* begin to apply to such property, and
 - (ii) in any other case, the date on which a water meter was required to be installed pursuant to the *Water Works By-law*,

and in each such case, the City Engineer may take subsequent meter readings and use same to estimate the amount of water delivered for periods of time for which the City Engineer has no meter readings.

- (b) Where a water service pipe is shut off pursuant to the *Water Works By-law* for more than 90 days, the owner and occupier will starting 90 days after the water service pipe was shut off be liable to pay (in respect to that shut off water service pipe) the applicable rate set out in Part IV of Schedule A of this By-law for "Turned Off, 1 Service", "Turned Off, 2 Services" or "Turned Off, 3 Services" as the case may be, in lieu of the rate previously applicable to such water service pipe on that property under Part V of Schedule A of this By-law, and in each case the rates payable under this Sentence (b) in respect of such partial periods are due and payable in advance on the first day of the partial period to which such rate applies or, at the Collector's option, upon any later date or dates which may be set out on a bill or series of bills issued by the Collector.
- (c) Despite Sentence 7.3(1),
 - (i) where Section 7.10(3) applies to a property,
 - (1) with respect to the period of time prior to the applicable date referred to in Clauses 7.10(3)(a)(i) or (ii), the owner and occupier of that property will pay in respect to such property on account of the wastewater discharged into the public sewer connection, the rates payable pursuant to Clause 7.3(1)(a), and
 - (2) with respect to the period of time on and after the applicable date referred to in Clauses 7.10(3)(a)(i) or (ii), the owner and occupier of such property will pay in respect to such property on account of the wastewater discharged into the public sewer connection (in lieu of the amount payable pursuant to Clause 7.3(1)(b) but in addition to the rates payable pursuant to Clause (1), Section 7.10(3), and any other rates payable pursuant to this By-law or the *Water Works By-law*) the total of the following amounts:
 - (A) the "Metered Property Rate" set out in Part V of Schedule A of this By-law multiplied by 85% of the number of "net units" of water delivered to such property, where "net units" means the amount obtained by subtracting the "waste discharge permit units" from the number of units of water delivered to the property, and where "waste discharge permit units" means the "units of industrial wastewater discharged from that property by the waste discharge permit user in the applicable billing period", where

"units of industrial wastewater discharged from that property by the waste discharge permit user" means the total number of units of industrial wastewater discharged by the waste discharge permit user, as measured or estimated by the City Engineer, in "the applicable billing period", and

"the applicable billing period" means the billing interval during which the number of "net units" of water delivered to the property is measured or estimated,

plus

- (B) the "Waste Discharge Permit User Rate" set out in Part V of Schedule A of this By-law multiplied by the "waste discharge permit units" where "waste discharge permit units" means the "waste discharge permit units" calculated pursuant to Clause (A) for the same billing period,

in any given billing period, except that this Clause (2) will only apply to the "current calendar year" as defined in Sentence 7.10(3)(a), and

- (ii) where Section 7.10(4) applies to a property, the owner and occupier of such property will pay in respect to such property on account of the wastewater discharged into the public sewer connection (in lieu of the amount payable pursuant to Clause 7.3(1)(b) but in addition to the rates payable pursuant to Section 7.10(4) and any other rates payable pursuant to this By-law or the *Water Works By-law*) the total of the following amounts:

- (1) the "Metered Property Rate" set out in Part V of Schedule A of this By-law multiplied by 85% of the number of "net units" of water delivered to such property, where "net units" means the amount obtained by subtracting the "waste discharge permit units" from the number of units of water delivered to the property, and where "waste discharge permit units" means the "units of industrial wastewater discharged from that property by the waste discharge permit user in the applicable billing period", where

"units of industrial wastewater discharged from that property by the waste discharge permit user" means the total number of units of industrial wastewater discharged by the waste discharge permit user, as measured or estimated by the City Engineer, in "the applicable billing period", and

"the applicable billing period" means the billing interval during which the number of "net units" of water delivered to the property is measured or estimated,

plus

- (2) the "Waste Discharge Permit User Rate" set out in Part V of Schedule A of this By-law multiplied by the "waste discharge permit units" where "waste discharge permit units" means the "waste discharge permit units" calculated pursuant to Clause (1) for the same billing period,

in any given billing period, except that this Clause (ii) will only apply to the "current calendar year" as defined in Sentence 7.10(4)(a), and

- (iii) where Section 7.10(5) applies to a property, the owner and occupier of such property will pay in respect to such property on account of the wastewater discharged into the public sewer connection (in lieu of the amount payable pursuant to Clause 7.3(1)(b) but in addition to the rates payable pursuant to Section 7.10(5) and any other rates payable pursuant

to this By-law or the *Water Works By-law*) the total of the following amounts:

- (1) the "Metered Property Rate" set out in Part V of Schedule A of this By-law multiplied by 85% of the number of "net units" of water delivered to such property, where "net units" means the amount obtained by subtracting the "waste discharge permit units" from the number of units of water delivered to the property, and where "waste discharge permit units" means the "units of industrial wastewater discharged from that property by the waste discharge permit user in the applicable billing period", where

"units of industrial wastewater discharged from that property by the waste discharge permit user" means the total number of units of industrial wastewater discharged by the waste discharge permit user, as measured or estimated by the City Engineer, in "the applicable billing period", and

"the applicable billing period" means the billing interval during which the number of "net units" of water delivered to the property is measured or estimated,

plus

- (2) the "Waste Discharge Permit User Rate" set out in Part V of Schedule A of this By-law multiplied by the "waste discharge permit units" where "waste discharge permit units" means the "waste discharge permit units" calculated pursuant to Clause (1) for the same billing period,

in any given billing period, except that this Clause (iii) will only apply to the "current calendar year" as defined in Section 7.10(5).

(4) Water Metered Property - Late Payment/Tax Roll/Collection

- (a) *Initial Penalty of 5%* Where any rate payable pursuant to this Section 7.3 has not been paid on or before the close of business of the due date set out on a bill issued pursuant to this Section 7.3, the amount of such unpaid rate will be subject to a penalty equal to 5% of the amount not actually paid and received by the close of business on the due date and this amount will be included in the amount entered on the tax roll pursuant to Sentence (b).
- (b) *Entry on Tax Roll* Where any rate payable pursuant to this Section 7.3 has not been paid within 30 days of the due date set out on a bill issued pursuant to this Section 7.3, the amount of such unpaid rate will (except to the extent to which such property is by law exempt from such rate) be entered by the Collector on the tax roll of the City for the property to which such unpaid rate applies.
- (c) *Occupier of Exempt Property Subject to Same Penalties* Where a property is by law exempt from the rates payable pursuant to this Section 7.3, but the occupier is not, then such rates including all related interest, penalties and other charges will be due and payable by the occupier of the exempt property in the same

manner as though such rates had been entered on the tax roll and been subject to the interest, penalties and other charges set out in Sentence (d).

- (d) *General Tax Penalties Apply* Where the rates payable pursuant to this Section 7.3 are not paid within 30 days of the due date set out on a bill issued pursuant to this Section 7.3, such unpaid rates will be subject to the same interest, penalties and other charges as are imposed on unpaid and overdue general taxes by By-law for the then current year's general taxes, and the provisions of those By-laws will be deemed to apply to such unpaid rates in the same manner as if such rates were unpaid general taxes.

7.4 PRIVATE WELL/GROUNDWATER SYSTEMS

(1) City Engineer to Measure or Estimate Discharge Volumes

For each property which is served partially or exclusively by a private well, groundwater or other source of water separate from the City-owned water service pipe, and is connected directly or indirectly to a public sewer connection, the owner and occupier will pay on account of the wastewater discharged into the public sewer connection from such sources of water (and in addition to any other rates payable pursuant to this By-law or *Water Works By-law*), the Metered Property Rate set out in Part V of Schedule A of this By-law for each unit of wastewater discharged into the public sewer connection.

(2) City Engineer to Measure/Estimate

The City Engineer will measure or estimate the volume of wastewater discharged over each relevant interval for the purposes of determining the rate payable pursuant to this Section 7.4 and in such manner as the City Engineer deems appropriate.

(3) Metered Property Rates Apply

Subject to Sentence (4), the rates payable pursuant to Sentence (1) will be pro-rated, adjusted, paid, entered on the tax roll and be subject to late payment fees in the same manner as the meter rates payable pursuant to Section 7.3.

(4) City Engineer May Require Information/Meter Installation

Despite Sentence (3), the City Engineer may at any time

- (a) using an Inspector, inspect the property and documentation of the owner and occupier as required to permit the City Engineer to measure or estimate the type and volume of wastewater discharged from the property,
- (b) require the owner and occupier to submit a technical substantiation report certified by a Professional Engineer substantiating the type and volume of wastewater discharged from the property, and
- (c) require the owner and occupier to install either or both an effluent meter on the public sewer connection or a water meter on the water service pipe and in any case on such terms and conditions as the Inspector or City Engineer may order,

and the City Engineer may utilize all or any combination of the information obtained pursuant to Clauses (a), (b) and (c) to measure or estimate the type and volume of wastewater discharged from the property.

7.5 SEPTIC SYSTEMS

(1) Minimum Rate for Septic

For each property which is served exclusively by a plumbing system which is not connected directly or indirectly to a public sewer connection, the owner and occupier of such property will pay the rate for “Other Property” set out in Part IV of Schedule A of this By-law, on account of the City’s costs of providing a public sewer system, whether or not that property is currently using or served by such system.

(2) Billing and Collection for Septic

The rates payable pursuant to Sentence (1) will be pro-rated, adjusted, billed, paid, entered on the tax roll and be subject to late payment interest, penalties and other charges in the same manner as the rates payable pursuant to Section 7.2.

7.6 OTHER PROPERTY (INCLUDING VACANT/UNOCCUPIED LOTS)

(1) Minimum Rate for Other Property

For each property which is not subject to any of the rates set out in Sections 7.2, 7.3, 7.4 or 7.5 of this By-law, the owner and occupier of such property will pay the rate for “Other Property” set out in Part IV of Schedule A of this By-law on account of the City’s costs of providing a public sewer system, whether or not that property is currently using or served by such system.

(2) Billing and Collection for Other Property

The rates payable pursuant to Sentence (1) will be pro-rated, adjusted, billed, paid, entered on the tax roll and be subject to late payment interest, penalties and other charges in the same manner as the rates payable pursuant to Section 7.2.

7.7 RETROACTIVE ADJUSTMENT WHERE LESS THAN 85% OF WATER IS DISCHARGED - FOR METERED PROPERTIES ONLY

(1) Application to City Engineer

Where less than 85% of the water delivered to a water meter is discharged into the public sewer system, the owner or occupier of the property may apply to the City Engineer for a retroactive adjustment to the rates payable pursuant to Section 7.3 and Part V of Schedule A of this By-law.

(2) Application Time Limit

A written application pursuant to Sentence (1) must be received within 24 months of the commencement of the interval to which the application relates.

(3) Application Process

A written application pursuant to Sentence (1) must be accompanied by a technical substantiation report setting out

- (a) the process by which the water was diverted from the public sewer system,
- (b) the place or places into which the diverted water was deposited,
- (c) the volume of water diverted or consumed,
- (d) data and verification of items (a), (b) and (c) over a period of at least 12 calendar months.

(4) Review Process

Upon receipt of an application from an owner or occupier pursuant to Sentences (1), (2) and (3), the City Engineer will review the application and may

- (a) request further information,
- (b) require that the report be certified by a Professional Engineer, or
- (c) conduct such inspections and reviews of the property, including the property's water and sewer plumbing system, as the City Engineer deems appropriate.

Upon completion of the City Engineer's review of the application as supplemented (where applicable) pursuant to Clauses (a), (b) and (c), the City Engineer will, if satisfied that less than 85% of the water delivered to the water meter has been discharged into the public sewer system over the interval referred to in the application, make an appropriate retroactive adjustment to the consumption/discharge component of the rate and will instruct the Collector to revise the rate payable on such terms and conditions as the City Engineer deems appropriate, provided always that

- (i) such rate will be calculated as the actual number of units of wastewater discharged as measured or estimated by the City Engineer multiplied by the "Metered Property Rate" set out in Part V of Schedule A of this By-law, and
- (ii) any adjustment refund will be applied by the Collector against rates payable in the next billing period.

7.8 ONGOING ADJUSTMENT WHERE LESS THAN 85% OF WATER IS DISCHARGED - FOR METERED PROPERTIES ONLY

(1) Application to City Engineer for Ongoing Adjustment

Where

- (a) an owner or occupier of a property has received a retroactive adjustment pursuant to Section 7.7 and in the City Engineer's opinion, the circumstances giving rise to the retroactive adjustment are likely to be of a continuing nature, or
- (b) the owner or occupier of a water metered property has not received a retroactive adjustment pursuant to Section 7.7 but anticipates that less than 85% of the

water delivered to a water meter will ordinarily be discharged into the public sewer system,

the owner or occupier of the property may apply to the City Engineer for an ongoing adjustment to the rates set out in Section 7.3 and Part V of Schedule A of this By-law on the basis of actual wastewater volumes as opposed to the amount of water delivered.

(2) Application Time Limit

A written application pursuant to

- (a) Clause (1)(a) must be received within 120 days of the owner or occupier receiving a retroactive adjustment pursuant to Section 7.7,
- (b) Clause (1)(b) must be received at least 60 days prior to the billing period for which the owner or occupier is making the application.

(3) Application Process

A written application pursuant to Sentence (1) must set out

- (a) either
 - (i) the reasons why the circumstances giving rise to the retroactive adjustment are likely to be of a continuing nature, including details of the lease or other interest in the property where the occupier as opposed to the owner is the applicant, or
 - (ii) the reasons why it is anticipated that less than 85% of the water delivered to a water meter will ordinarily be discharged into the public sewer system,and,
- (b) either
 - (i) the type of effluent meter which has been or will be installed, including make, model, specifications, manufacturer, calibration security, and accuracy tolerances, as well as details as to the location in which the effluent meter has been or will be installed, in relation to the water and wastewater plumbing systems on the property, or
 - (ii) a technical substantiation report describing the monitoring process, systems and frequencies proposed to measure or estimate actual wastewater volumes,and
- (c) any other information which the City Engineer or Collector require.

(4) Review Process

Upon receipt of an application from an owner or occupier pursuant to Sentences (1), (2) and (3), the City Engineer will review the application and may

- (a) request further information,
- (b) require that the report be certified by a Professional Engineer, or
- (c) conduct such inspections and reviews of the property, including the property's water and sewer plumbing system, as the City Engineer deems appropriate.

Upon completion of the City Engineer's review of the application as supplemented (where applicable) pursuant to Clauses (a), (b) and (c), the City Engineer will, if satisfied that less than 85% of the water delivered to the water meter will likely ordinarily be discharged into the public sewer system over the interval referred to in the application, make an appropriate ongoing adjustment to the volume component of the rate on such terms and conditions as the City Engineer deems appropriate, and will instruct the Collector to revise the rate payable, provided always that such rate will be calculated as the actual number of units of wastewater discharged as measured or estimated by the City Engineer multiplied by the "Metered Property Rate" set out in Part V of Schedule A of this By-law.

7.9 NO ADJUSTMENT OR PARTIAL EXEMPTION RELIEVES OWNER/OCCUPIER FROM LIABILITY FOR ERRORS OR OMISSIONS

No retroactive adjustment pursuant to Section 7.7 and no ongoing adjustment pursuant to Section 7.8 will relieve the owner and occupier from liability to pay the rates otherwise payable pursuant to this By-law where

- (a) any information provided by the owner, occupier or Professional Engineer to the City proves to be false or misleading in any material respect, or
- (b) there is any wastewater discharged by the owner or occupier into the public sewer system which has not been included in the estimates or measurements of discharge volumes utilized by the City Engineer or Collector in granting a retroactive adjustment pursuant to Section 7.7 or an ongoing adjustment to the rates pursuant to Section 7.8.

7.10 WASTE DISCHARGE PERMIT USERS

(1) Waste Discharge Permit Fees

Any and all fees paid to Metro Vancouver pursuant to the GVS & DD By-law by each property having a waste discharge permit user, are in addition to the rates payable pursuant to Section 7.3 and Part V of Schedule A of this By-law.

(2) Monitoring & Enforcement

The City may monitor and inspect waste discharge permit user facilities on behalf of the GVS & DD.

(3) Calculation of fees

- (a) Calculation of Discharge Weights/Volumes – The discharge weight and volume components of the rates payable pursuant to the GVS&DD By-law will be measured or estimated by the City Engineer as follows:
- (i) The rates payable pursuant to the GVS&DD By-law will be based on the weights and volumes of BOD Load, TSS Load and Flow discharged pursuant to the waste discharge permit for the property,
 - (ii) Discharge volumes will be measured or estimated by the City Engineer based on the waste discharge permit users and Inspectors periodic inspections, readings and data measurements in such manner as the City Engineer determines is appropriate and in accordance with the waste discharge permit,
 - (iii) Where, due to a breach of the waste discharge permit by the waste discharge permit user,
 - (1) a reading, inspection or other measurement cannot be conducted or obtained by the Inspector.
 - (2) a reading, inspection, or other measurement cannot be accurately or safely conducted or obtained by the Inspector.
 - (3) a reading, measurement, laboratory results or other information required to be supplied by the waste discharge permit user has not been supplied; or
 - (4) an effluent meter or other component of the plumbing system has, without the City Engineers or Inspectors written authorization, been disconnected or tampered with, or is malfunctioning.then the Inspector will mail or deliver a notice to the property, setting out the nature of the breach or event, so that the owner and occupier have notice of same, but in any event, the City Engineer may measure or estimate the BOD Load, TSS Load and Flow which were likely discharged into the public sewer system by the waste discharge permit user over the relevant period of time, and instruct the Collector to issue a bill based on such estimates.
 - (iv) The City Engineer may apply the procedures and policies utilized by the GVS&DD pursuant to the GVS&DD By-law in measuring or estimating the BOD Load, TSS Load and Flow, provided always that the City Engineer is not bound to do so, and
 - (v) The City Engineer will use the information supplied by the waste discharge permit user pursuant to the waste discharge permit provided the information is consistent with the City Engineer's and Inspector's readings, inspections and measurements and will, subject to Sentences (i) to (iv) above, utilize such information to measure or estimate the BOD Load, TSS Load and Flow discharged over each relevant measurement period.

(4) Other Sewer Discharge Obligations

Nothing in Section 7 of this By-law, including without limitation, the liability to pay and the payment and acceptance of rates in respect of discharges of wastewater which were discharged in violation of this By-law, the Waste Management Act or the GVS&DD By-law will absolve a person from that person's duties and liabilities under this By-law, the Waste Management Act or the GVS&DD By-law.

7.11 CONTAMINATED GROUNDWATER DISCHARGE RATES

Where contaminated groundwater is required to be discharged into a sanitary system or a combined sewer, the site owner must first obtain a Waste Discharge Permit and pay to the City the applicable rate set out in Part VI of Schedule A to this By-law for the volume discharged.

7.12 SHIP WASTEWATER DISPOSAL RATES

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

7.13 RATE 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, the annual charge as set out in Part VI of Schedule A to this By-law must be paid by the utility to the City in advance on January 1 of each year or partial year in which such a connection is maintained.

7.14 SHUT-OFF OF WATER FOR NON-PAYMENT OF SEWER RATES

When any rates or other amounts due and payable in accordance with this Section 7 remain unpaid after one month from the date on which a late payment penalty becomes payable, the Collector will mail a notice to the property containing a statement of the amount owing and that the amount owing is required to be paid within 10 days from the date of the notice. If the amount owing is not paid within the time specified in the notice, the City Engineer or Inspector will shut off the water, and the water will not be turned on again until the owner or occupier has paid to the City:

- (i) the amount owing, and
- (ii) \$50.00 on account of the City's administrative costs for each visit to the property for the purpose of turning off or turning on the water, and
- (iii) any additional cost which the City has incurred in taking off or replacing the curb stop box in order to prevent the unauthorized use of water.

If the City Engineer or Inspector is required to call at a property to shut off the water for the reasons described in this Section 7.14, the fee prescribed in Clause (ii) will apply regardless of whether or not the City Engineer or Inspector turns off the water.

7.15 UNPAID RATES - RECOVERABLE AS DEBTS/TAXES

The rates and other amounts payable under this By-law are a debt due and payable by the owner and occupier to the City and may be recovered by the City in any Court of competent jurisdiction. All amounts entered on the tax roll pursuant to this By-law will form a charge on the property to which they relate and may be collected in the same manner as taxes.

7.16 APPLICATION OF PAYMENTS

The Collector may, upon receipt of any payment on account of unpaid general taxes or any other amounts payable under this By-law, the *Water Works By-law*, the *Solid Waste and Recycling By-law*, or any other By-law, apply such payment in any manner which the Collector deems appropriate.

7.17 ADJUSTMENT FOR PARTIAL PERIODS/READINGS

- (a) Subject to Sentence (b), where any rate, charge or fee is prescribed
 - (i) by the month, year or other period, the amount payable for a partial period will be calculated on the basis that the rate, charge or fee is incurred daily and the amount payable will be proportioned accordingly, or
 - (ii) by a unit of weight or volume and the information necessary to calculate such weight or volume is not available, the City Engineer may estimate and proportion for the period when no such information is available by interpolating or extrapolating from prior or later periods when such information was obtained on the basis that the weights or volumes over all relevant periods was, on average, constant
- unless otherwise provided in this By-law or any contract made by the City under this By-law.
- (b) Despite Sentence (a), the City Engineer may adjust the measurements, calculations and estimates made pursuant to Sentence (a) in order to take into account seasonal variations or other factors which are known by the City Engineer to consistently or regularly affect consumption of water or the discharge of wastewater, as the case may be.

7.18 CHANGE IN USE

- (a) An owner or occupier must notify the Inspector or City Engineer in writing of any change in the use, occupancy, site served, or other matter which may affect the rates payable under this By-law.
- (b) Should any change entitle the owner or occupier to a reduction in rates or to a refund of rates paid in advance, such reduction or refund will take effect from the receipt of notice or from the actual date of change, whichever is later.
- (c) Should any change entail an increase in the rates, such increase will take effect from the actual date of change as determined or estimated by the City Engineer.

7.19 CITY ENGINEER MAY UTILIZE INDEPENDENT LABORATORIES

The City Engineer may utilize such third party laboratory as the City Engineer deems appropriate to conduct any necessary or appropriate chemical analyses of wastewater samples in the course of carrying out the City Engineer's measurement and estimation functions under this By-law.

7.20 ACCOUNT ADMINISTRATION

The Collector will issue all bills under this By-law to the owner or occupier and may do so by mailing the bill to the address for the property as shown on the tax roll for the property or as requested in writing by the owner or occupier. Where an owner or occupier is entitled to a refund under this By-law, and the refund is not made by the Collector by entry as a credit against the tax roll for the property, the Collector will pay the refund to the owner, except that

- (a) where the owner has authorized the City in writing to pay the refund to the occupier, the Collector may pay the refund to the occupier named in the owner's written authorization,
- (b) where the property is exempt from, and the owner is not liable for, the payment of the rates in respect to which the refund is being made, the Collector will pay the refund to the occupier liable to pay the rates in respect to which the refund is being made, and
- (c) where the rates in respect to which the refund is to be made are payable by both the owner and occupier, but are solely or primarily attributable to the activities of the occupier and not the owner, the Collector may pay the refund to the occupier.

SECTION 8 - OFFENCES AND PENALTIES

8.1 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, or who fails to comply with an order or notice given under 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.

8.2 PENALTIES

- (1) Every person who commits an offence against this By-law is liable to a fine and penalty of not less than \$250.00 or more than \$10,000.00 for each offence.
- (2) Every person who commits an offence of a continuing nature against this By-law is liable to a fine not less than \$250.00 and not more than \$10,000.00 for each day such offence continues.

SECTION 9 - SCHEDULES ARE INTEGRAL TO BY-LAW

Schedule A and Schedule B are attached to and form an integral part of this By-law.

10. REPEALS

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

11. 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.

(Signed) "Philip W. Owen"
Mayor

(Signed) "Ulli S. Watkiss"
City Clerk

SCHEDULE A

PART I

SEWER CONNECTION RATES

Every applicant for a public sewer connection must pay to the City the applicable sewer connection rates set out below, payable as follows:

- (a) a non-refundable application fee of 10% of the applicable rates set out below in sections 1, 2(a) through (f), and 6, at the time of application, and
- (b) the remaining amount when invoiced by the City, prior to permit issuance.

1.	Public sewer connection, for Single Detached House with or without Laneway House, or Duplex (including 3 inch/75mm and greater pressure connections)	\$18,669.00
2.	Public sewer connection, other than Single Detached House or Duplex	
	a) 4 inch/100 mm diameter	\$27,337.00
	b) 6 inch/150 mm diameter	\$32,995.00
	c) 8 inch/200 mm diameter	\$37,327.00
	d) 10 inch/250 mm diameter	\$43,060.00
	e) 12 inch/300 mm diameter	\$48,926.00
	f) 15 inch/375 mm diameter or greater	\$54,714.00
	g) connection to building sewer where installation cost is greater than 1.5 times the applicable flat rate connection fee set out in this Schedule	At cost, pursuant to Section 2.7(2)
	h) maintenance hole installation in conjunction with a public sewer connection pursuant to Section 2.7(3) of Sewer and Watercourse By-law	At cost, pursuant to Section 2.7(3)
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 Section 2.7(4)	\$8,353.00
5.	New fitting on a single sewer pursuant to Section 2.7(4)	\$3,683.00

6.		Inspection of a plumbing system, subsoil drainage pipes, and a building sewer	\$505.00
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PART III

FLAT RATES FOR UNMETERED PROPERTY

Single Detached House	\$1,173.00
Single Detached House with Secondary Suite	\$1,584.00
Single Detached House with either Laneway House or Infill Single Detached House	\$1,584.00
Single Detached House with Secondary Suite and either Laneway House or Infill Single Detached House	\$1,995.00
Strata Duplex (per dwelling unit)	\$793.00
2 Services, 1 Lot	\$2,344.00
3 Services, 1 Lot	\$3,513.00
4 Services, 1 Lot	\$4,688.00
Parking Lot/Garden	\$670.00

PART IV

FLAT RATES FOR OTHER PROPERTY OR SHUT OFF WATER SERVICE

Other Property	\$529.00
Turned Off, 1 Service	\$529.00
Turned Off, 2 Services	\$529.00
Turned Off, 3 Services	\$529.00

PART V

UNIT-BASED RATES FOR METERED PROPERTY

Metered Property Rate	\$7.545
Waste Discharge Permit User Rate	\$2.485

PART VI

**FLAT RATE FOR SPECIFIC TYPES
OF DISCHARGES/DISPOSALS**

For the discharge of contaminated groundwater, pursuant to Section 7.11 (per cubic metre)	\$2.71
For the disposal of ship wastewater, pursuant to Section 7.12 (per cubic metre)	\$2.71
For discharges by Utilities, pursuant to Section 7.13 (per maintenance hole connected)	\$715.00

SCHEDULE B - Repealed