

THE CORPORATION OF THE DISTRICT OF SUMMERLAND

BYLAW NUMBER 98-002

SANITARY SEWER SYSTEM REGULATION BYLAW

WHEREAS it is expedient that all real property that has shared in sewer extension costs and is capable of being served by a sanitary sewer, should so be served and connected;

AND WHEREAS there are possible components of sewage in various concentrations which are detrimental or costly to the operation and maintenance of the sanitary sewage system and must be prohibited;

AND WHEREAS it is deemed necessary and expedient to regulate the operation and use of the sanitary sewer system of the District;

AND WHEREAS pursuant to Section 574 of the Municipal Act, being Chapter 323 of the R.S.B.C.1996 and amendments thereto, the Municipal Council may by bylaw provide for the establishment of a system of sanitary sewer works and regulate the design of said works by persons other than the municipality and require connection to said works;

NOW THEREFORE, the Municipal Council of the district of Summerland, in Open Meeting Assembled, enacts as follows:

SECTION

1.0 TITLE

- 1.1 This bylaw may be cited as "District of Summerland Sewer Regulation Bylaw Number 98-002.

2.0 APPLICABILITY

- 2.1 This bylaw applies to all lands shown in Schedule "A" attached to Bylaw Number 95-014.

3.0 SEVERABILITY

- 3.1 If any section, subsection, clauses, sub-clause or phrase of this bylaw is for any reason held to be invalid by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this bylaw.

4.0 SANITARY SEWER SYSTEM REGULATIONS

- 4.1 This section provides for the regulation and use of sanitary sewers for all properties that have shared in sewer extension costs and are capable of being served by a sanitary sewer system.

5.0 FORCE AND EFFECT

- 5.1 This bylaw shall come into force and effect on the date of its adoption by the Municipal Council of the Corporation of the District of Summerland.

READ A FIRST, SECOND AND THIRD TIMES by the Municipal Council this 22nd day of June, 1998.

RECONSIDERED, FINALLY PASSED AND ADOPTED BY THE MUNICIPAL COUNCIL OF THE CORPORATION OF THE DISTRICT OF SUMMERLAND THIS 13th DAY OF JULY, 1998.



MAYOR



MUNICIPAL CLERK

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SECTION 1 - ADMINISTRATION AND GENERAL REQUIREMENTS

1.1 SCOPE

- 1.1.1 This section provides for the regulation and use of sanitary sewers .
- 1.1.2 The provisions of this section shall apply to all direct or indirect discharges to any part of the public sanitary sewerage system.
- 1.1.3 This section, among other things, regulates the quantity and quality of discharged wastes and the degree of pre-treatment required; and provides for the approval of plans for waste treatment.
- 1.1.4 Nothing in this section relieves any person or organization from complying with any provision of any Federal or Provincial legislation, or any other bylaw of the District of Summerland.

1.2 DEFINITIONS

- 1.2.1 In this section, unless the context otherwise requires, the following words and terms shall have the meanings hereinafter assigned to them:

B.O.D. or "biochemical oxygen demand" means the quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory conditions in five (5) days at 20°C, expressed in milligrams per litre as determined by the appropriate procedure in "Standard Methods".

Building Drain means the horizontal piping, including any vertical offset that conducts sewage, or clear water waste to a building sewer.

Building Inspector means the District's Building Inspector as appointed by resolution of the Municipal Council or his duly appointed representative.

Building Sewer (also called a "service connection") means a pipe that is connected to a building drain one (1) metre outside a wall of a building and that leads to a public sewer (sewer connection) or a private sewage disposal system.

District Engineer means the District's Engineer as appointed by resolution of the Municipal Council or his duly appointed representative. The range of authority of the District Engineer is intended to be, but not limited to, items involving Capital Works and expenditures, sewer infrastructure integrity and when other bylaws are involved.

C.O.D. or "chemical oxygen demand" means the measure of the oxygen consuming capacity of inorganic and organic matter present in domestic or industrial wastewater as determined by the appropriate procedure described in "Standard Methods".

Cooling Water means untreated water originating from heat exchangers or similar type units.

Director of Works & Utilities means the person appointed by the Municipal Council as the head of the District's Works & Utilities Department and includes employees of the Works & Utilities Department of the District when acting under the direction of the Director of Works & Utilities.

Domestic means resulting from natural processes and not produced by commercial or industrial activities.

Domestic Wastewater means the water carried wastes produced from non-commercial or non-industrial activities and which result from normal human living processes.

Effluent means the liquid outflow of any facility designed to treat or convey wastewater.

Flammable liquid means any liquid having a flash point below 38°C and having a vapour pressure not exceeding 280 kPa at 38°C.

Garbage means solid wastes from domestic and commercial preparation, cooking, and dispensing of food, and from the handling, storage and sale of produce.

Grab Sample means an aliquot of a sampled stream or discharge collected at one particular time and place.

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

Industrial wastewater means all water carried wastes and waste-water excluding domestic wastewater and uncontaminated water, and includes all wastewater from any processing, institutional, commercial, or other operation where the wastewater discharged includes wastes of non-human origin.

Municipal/Municipality means the District of Summerland.

Municipal Council means the duly elected Officials of the District of Summerland.

Offal means waste portions of food, animals, fowl or fish.

One-operating-day Composite Sample (one day sample) means a composite sample discharge consisting of flow proportioned samples collected at consecutive one-hour intervals over the duration of one operating day as outlined in Schedule "E", attached to and forming part of this bylaw.

Person includes any person, a corporation, partnership or party, and the personal or other legal representative of a person to whom the context can apply according to law.

Pesticide means an organism or material that is represented, sold, used or intended to be used to prevent, destroy, repel or mitigate a pest and includes:

- (a) a plant growth regulator, plant defoliator or plant desiccant; and
- (b) a control product, other than a device that is a control product under the Pest Control Products Act (Canada).

pH means logarithm, to the base 10, of the reciprocal of the concentration of Hydrogen ions in moles per litre of solution.

Plumbing Code means any regulation made by the Lieutenant Governor of the Province of British Columbia, in accordance with Section 692 of the Municipal Act.

Plumbing fixture means a receptacle, appliance, apparatus or other device that discharges sewage or clear-water waste, and includes a floor drain.

Regional District means the Regional District of Okanagan Similkameen.

Sanitary Sewer Specified Area means an area of land within the District, defined by bylaw adopted by the Municipal Council, which is designated to receive works or service from the municipality.

Sanitary Sewer System means all sewer works and all appurtenances thereto, including sewer mains, connections, pumping stations, treatment plants, lagoons and sewer outfalls laid within any highways, municipal right-of-way or easement and owned and operated by the Municipality and installed for the purpose of conveying, treating and disposing of domestic municipal wastes and industrial wastes.

Septic Tank means any device or structure designed for the temporary storage of wastewater.

Service Connection (also called "Building Sewer") means a pipe connecting a building drain to a sanitary sewer connection at the property line or to a private sewage disposal system.

Sewer means a pipe, including manholes and other appurtenances other than a service connection, in the sewer system.

Sewer Connection means a sewer pipe extending from a public sanitary sewer to the property line of the property being served or to be served or to a Statutory Right of Way or easement in favour of the property to be served.

Special Waste means a substance that is defined as "Special Waste" as interpreted by the Waste Management Act.

Standard Methods means the Standard Methods of Water and Wastewater Analysis (19th Edition, 1995, or current edition at the time of testing) as published by the American Public Health Association, the American Water Works Association, the Canadian Standards Association, and the Water Pollution Control Federation.

Total Suspended Solids means the solid matter according to particle size, expressed in milligrams per litre, in a liquid as determined according to "Standard Methods".

Two-Hour Composite Sample means a composite sample consisting of equal portions of 8 Grab Samples collected at consecutive 15-minute intervals.

Uncontaminated Wastewater means water such as spent cooling water, de-chlorinated water discharged from a swimming pool, water used in street cleaning.

Wastewater means the water-borne wastes of the municipality derived from human or industrial sources including domestic wastewater and industrial wastewater, but does not include rain water, ground water, or drainage of uncontaminated water.

Wastewater treatment plant means any arrangement of devices and structures used for treating wastewater.

Watercourse means:

(i) the bed and shore of a river, stream, lake, creek, lagoon, swamp, marsh or other natural body of water; or

(ii) a channel, ditch, reservoir or other man-made surface feature;

whether they contain or convey water continuously or intermittently.

1.3 CONNECTION REQUIREMENT

1.3.1 The owner of every parcel of real property within a Sanitary Sewer Specified Area, for which a service connection to the sanitary sewer system can be, or has been made, and upon which a building or structure containing a plumbing fixture is situate, shall connect such building or structure to the service connection.

1.3.2 In the event of any owner failing to make the required connection within sixty (60) days of being notified in writing by the District to do so, the Director of Works & Utilities may order the required connection be made by District workmen or others at the Owner's expense and the expenses incurred shall become a lien on the land or real property on or for which the charge is imposed, done or provided and the District may recover the expenses in a similar manner to municipal taxes and the expenses shall be subject to the same penalty and interest additions as municipal taxes.

1.3.3 The Director of Works & Utilities may allow any owner of real property outside of an existing Sanitary Sewer Specified Area to connect into the existing sanitary sewer system on the basis of the following:

(a) the owner paying all costs of extending the District's sanitary sewer system including sewer development charges;

(b) the owner paying a share of an existing or future proposed specified area cost including administration and bylaw amendment costs. In either case, approval must be granted by Municipal Council.

1.4 APPLICATION FOR SANITARY SEWER CONNECTION

- 1.4.1 (a) No person shall connect any building sewer or storm building sewer to the sanitary sewer system until he has completed an application and an agreement in the form of Schedule "4.A" of this bylaw and paid the connection fee as applicable. The applicant shall, in completing such form of application and agreement, provide true and accurate information as to all details called for therein.
- (b) The applicant or an agent on his behalf must also obtain a plumbing permit and pay a sewer development charge unless such charge has been collected under the Development Cost Charge Bylaw requirements.

1.5 SEWER CONNECTIONS STANDARDS

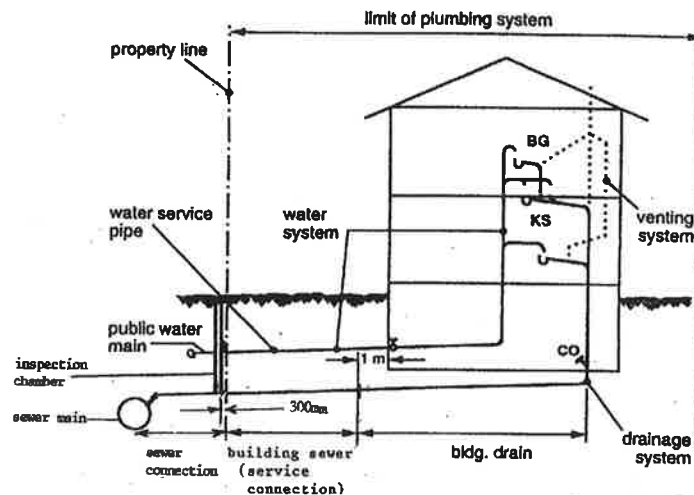
- 1.5.1 Every sewer connection shall be installed in accordance with the standards contained in the District's Subdivision and Development Bylaw, as amended or revised and shall be installed prior to the installation of every building sewer. The District shall not be responsible to meet the elevation or connect to an existing building sewer installed by the owner prior to installation of the sewer connection. Building owners shall be required to meet the sewer connection elevation.

1.6 BUILDING SEWER (Service Connection) AND INSPECTION

- 1.6.1 Every building sewer shall be constructed at the cost of the owner in accordance with the standards contained in the District's Subdivision and Development Bylaw as amended or revised, and to the requirements of the British Columbia Plumbing Code. The Director of Works & Utilities may require conformity with the District's Subdivision and Development Bylaw in the case of differing standards relative to the B.C. Plumbing Code or unique site or special situations.
- 1.6.2 The owner shall notify the District's Building Inspector as soon as the work for which a connection permit has been issued is ready for inspection and no building sewer work shall be covered until it has been inspected and approved.
- 1.6.3 If upon inspection it is determined that any building sewer work is defective, or that such work was not ready for inspection after notification as required by Article 1.6.2, the owner shall file a further Notice of Inspection, together with the required fee to cover the cost of such extra inspection.
- 1.6.4 The building sewer shall be repaired and maintained by the property owner or occupant at their expense.
- 1.6.5 Where any building sewer is abandoned, the owner or occupant shall notify the District's Building Inspector, and, upon receiving proper authorization, the owner or occupant shall block and/or seal the service connection. The service connection shall be blocked at the property line, or at the sewer main, as specified by the Director of Works & Utilities, and the costs of such work shall be borne by the property owner or occupant.

1.6.6

Plumbing System



1.7 INTERFERENCE WITH SANITARY SEWER SYSTEM

1.7.1 No person shall do any work upon, or interfere in any way with the sanitary sewer system without the written permission of the Director of Works & Utilities.

1.7.2 No person shall enter or work upon the sewer system without meeting the applicable confined space entry, street regulations or other safety requirements, required by the Workers' Compensation Act, being Chapter 437 of the R.S.B.C. 1979 and amendments thereto.

1.8 SANITARY SEWER RATES

1.8.1 All sanitary sewer rates and charges are levied and administered by the District's Fees and Charges Bylaw.

1.9 SEPTIC TANKS-HOLDING TANKS-R.V. DUMPING OUTLET

1.9.1 No septic tank shall be connected to the sanitary sewer system without the express written approval of the Director of Works & Utilities or the District's Building Inspector.

1.9.2 No person shall permit any sludge or deposit contained in any septic tank, holding tank or sewage field to enter into the sanitary sewer system. With the approval of the Director of Works and Utilities all sludge or septic tank deposits shall be disposed of at the District's disposal facility located at the District's sanitary landfill.

- 1.9.3 All existing septic tanks and holding tanks must be pumped out, removed or filled with clean sand or gravel within thirty (30) days after completion of the installation and final inspection of the sanitary sewer connection.
- 1.9.4 No person shall install a Recreation Vehicle dumping outlet on a residential lot sewer service line entering into the sanitary sewer system.
- 1.10 RIGHT OF ENTRY**
- 1.10.1 The Director of Works & Utilities or the Building Inspector and anyone authorized by them are hereby authorized to enter upon any property or premises at any reasonable time in order to ascertain whether or not the regulations contained in this bylaw have been complied with.
- 10.2 Any person interfering with or obstructing the entry of the Director of Works & Utilities or the Building Inspector or their duly authorized representative into any premises, after that person has identified himself, shall be guilty of an offense under this bylaw and shall be liable to the penalties provided herein.
- 1.10.3 No person shall hinder or prevent the Director of Works & Utilities or the Building Inspector or their duly authorized representative 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 bylaw.

SECTION 2 - WASTE DISCHARGE

2.1 PROHIBITED WASTES

- 2.1.1 No person shall discharge or permit to be discharged into any pipe, main, conduit, manhole, street inlet, gutter or aperture draining into the sanitary sewer system:
- (a) Any gasoline, benzene, naphtha, alcohol, fuel, oil, solvents, acetone or flammable or explosive liquid, solid or gas.
 - (b) Any pesticides, insecticides, herbicides or fungicides save and except chemicals contained in storm water emanating from trees or vegetation treated in accordance with the Pesticide Control Act, R.S.B.C., 1979 C. 322 and regulations.
 - (c) Any corrosive, noxious or malodorous gas, liquid, or substance which either singly or by interaction with other wastes, is capable of:
 - (i) creating a public nuisance or hazard to life;
 - (ii) preventing human entry into a sewer or pump station; or
 - (iii) causing damage to the sewerage system.
 - (d) Radioactive material - except within such limits as are permitted by license issued by the Atomic Energy Control Board of Canada.
 - (e) Any material from a cesspool.

- (f) Any solid or viscous substance capable of obstructing wastewater flow or interfering with the operation of the sewerage system or treatment facilities. These substances include but are not limited to ashes, cinders, grit sand, mud, straw, grass clippings, insoluble shavings, metal, glass, rags, feathers, tar, asphalt, creosote, plastics, wood, animal paunch contents, offal, blood, bones, meat trimmings and waste, fish or fowl head, shrimp, crab or clam shells, fish scales, entrails, lard, mushrooms, tallow, baking dough, chemical residues, cannery or wine waste, bulk solids, hair and fleshings, spent grain and hops, whole or ground food or beverage containers, garbage, paint residues, cat box litter, slurries of concrete, cement, lime or mortar.
- (g) Any storm water or uncontaminated wastewater into the sanitary sewer system.
- (h) Any waste, liquid or material classified as a 'Special Waste' pursuant to the provisions of the WASTE MANAGEMENT ACT, R.S.B.C., 1979, C. 428.5 and amendments thereto.
- (i) Any material from a septic tank, holding tank or sewage disposal field, except sewage material taken from motor boats or recreational vehicles where the disposal facilities are located at public facilities such as service stations, Recreation Vehicle dealerships or marinas.

2.2

STANDARDS FOR RESTRICTED WASTES

2.2.1

Sanitary Sewer System

No person shall discharge or permit to be discharged into any pipe, main, conduit, manhole, street inlet, gutter, or aperture draining into the sanitary sewer system:

- (a) any non-domestic waste having a B.O.D. in excess of 500 milligrams per litre as analyzed in a one-operating day Composite Sample, 1000 milligrams per litre as analyzed in a 2-hour Composite Sample, and 2000 milligrams per litre as analyzed in a Grab Sample;
- (b) any non-domestic waste having a C.O.D. in excess of 750 milligrams per litre as analyzed in a one-operating-day Composite sample, 1500 milligrams per litre as analyzed in a 2-hour Composite sample, and 3000 milligrams per litre as analyzed in a Grab sample.
- (c) any non-domestic waste which contains suspended solids in a concentration that is in excess of 600 milligrams per litre as analyzed in a one-operating-day Composite Sample, 1200 milligrams per litre as analyzed in a 2-hour Composite Sample, and 2400 milligrams per litre as analyzed in a Grab Sample;
- (d) any garbage that has been ground, comminuted or shredded by a garbage disposal unit;
- (e) any non-domestic liquid or vapour having a temperature higher than 65° Celsius;
- (f) any non-domestic waste which contains oil and grease in a concentration that is in excess of 150 milligrams per litre as analyzed in a

a one-operating day Composite Sample, 300 milligrams per litre as analyzed in a 2-hour Composite Sample, and 600 milligrams per litre as analyzed in a Grab Sample, and any non-domestic waste which contains oil and grease derived from a petroleum source in a concentration that is in excess of 15 milligrams per litre as analyzed in a one-operating-day Composite Sample, 30 milligrams per litre as analyzed in a 2-hour Composite Sample, and 60 milligrams per litre as analyzed in a Grab Sample;

(g) any substance which may solidify or become viscous at temperatures above 0° Celsius;

(h) any non-domestic waste which has a pH lower than 5.0 or higher than 11.0 as determined by a Grab Sample of the discharge, or less than 5.5 or higher than 10.5 as determined by a two-hour Composite Sample.

(i) any water or waste that will by itself or with other water or wastes in the sewerage system, release noxious gases, or create any other condition deleterious to the pipe, gaskets, structures or treatment processes;

(j) any water or waste containing dyes or colouring materials which pass through a sewage works and discolour the sewage works effluent, with the exception of dyes used by the District for testing purposes;

(k) any water or waste containing a hazardous or a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewer, sewage treatment equipment and sewage treatment process, to constitute a hazard to humans or animals, or to create any hazard in the receiving waters or the effluent of the sewage treatment plant.

(l) any material which exerts or causes:

(i) unusual concentrations of inert suspended solids, such as, but not limited to, fuller's earth;

(ii) unusual concentrations of dissolved solids such as but not limited to sodium chloride, calcium chloride or sodium sulphate;

(m) any water or waste added for the purpose of diluting wastes which would otherwise exceed applicable maximum concentrations;

(n) any non-domestic waste which, at the point of discharge into a sewer, contains any substance, in a combined or uncombined form, with a concentration in excess of the levels set out below. All concentrations are expressed as total concentrations, which include both the dissolved and undissolved substances.

Substance	Expressed as	Concentration in milligrams per litre		
		One Day Composite Sample	Two Hour Composite Sample	Grab Sample
Aluminum	Al	50.0	100.0	200.0
Arsenic	As	1.0	2.0	4.0
Boron	B	50.0	100.0	200.0
Cadmium	Cd	0.2	0.4	0.8
Chromium	Cr	4.0	8.0	16.0
Cobalt	Co	5.0	10.0	20.0
Copper	Cu	2.0	4.0	8.0
Cyanide	Cn	1.0	2.0	4.0
Iron	Fe	10.0	20.0	40.0
Lead	Pb	1.0	2.0	4.0
Manganese	Mn	5.0	10.0	20.0
Mercury	Hg	0.05	0.1	0.2
Molybdenum	Mo	1.0	2.0	4.0
Nickel	Ni	2.0	4.0	8.0
Phenols	-	1.0	2.0	4.0
Phosphorus	P	12.5	25.0	50.0
Silver	Ag	1.0	2.0	4.0
Sulphate	SO ₄	1500.0	3000.0	6000.0
Sulphide	S	1.0	2.0	4.0
Tin	Sn	5.0	10.0	20.0
Zinc	Zn	3.0	6.0	12.0

Note: More restrictive guidelines may be required by the Director of Works & Utilities if he considers there is some detrimental effect on the District's treatment plant, infrastructure or workmen.

- (o) any water or waste containing substances in such concentrations that are not amenable to treatment or reduction by the sewage treatment process employed, or are amenable to treatment only to such a degree that the sewage treatment plant effluent cannot, during normal operation, meet the requirement of any other agency having jurisdiction over discharges to the receiving waters.

- (p) any material or substance (e.g. enzymes and/or bacteria) that alters the structure of the waste(s) but does not reduce the loading (C.O.D.).

2.3 ACCIDENTAL DISCHARGES

- 2.3.1 Every person responsible for, or aware of, the accidental discharge of prohibited substances into the sanitary sewer system shall report the same forthwith to the Director of Works & Utilities in order that the necessary precautions can be taken to minimize the deleterious effects of the discharge.

SECTION 3 - ADDITIONAL REQUIREMENTS FOR CONNECTION TO THE SANITARY SEWER SYSTEM

3.1 WASTEWATER TREATMENT FACILITIES

- 3.1.1 Any industrial wastewaters likely to damage or increase maintenance costs on the sewer system or which may detrimentally affect the sewage treatment plant; or contaminate surface or sub-surface waters, shall be pre-treated to render them innocuous prior to discharge into a public sewer.
- 3.1.2 Discharges of liquid wastes exceeding the strength, nature, quantity or quality permitted by this bylaw, shall be pre-treated in a facility designed, constructed and operated by the discharger so as to fulfill all of the requirements of this bylaw. The Director of Works & Utilities may waive this requirement in lieu of surcharge billings for waste discharge with issuance of Waste Discharge Permits and the payment of the fees as outlined in Schedule "4.B", attached to and forming part of this bylaw.
- 3.1.3 All details pertaining to the treatment process or processes, capacity, location, materials, equipment, methods of construction and all operational procedures and methods of process control of treatment facilities shall be approved by the Director of Works & Utilities before any portion of such facilities is installed. The approval of such plans and devices shall not imply that the treatment process or processes will comply with the regulations and/or restrictions contained in this bylaw.
- 3.1.4 All wastewater treatment facilities must be kept clear of obstructions so as to provide immediate access for inspection and servicing.

3.2 DESIGN REQUIREMENTS FOR NON-RESIDENTIAL USES CONNECTING TO THE SANITARY SEWERAGE SYSTEM

- 3.2.1 Where an owner or occupier of premises upon which an industrial or commercial activity is proposed or is carried on wishes to connect these premises to the sewerage system he shall comply with Article 3.2.3 herein.
- 3.2.2 Where an owner or occupier intends to expand an industrial or commercial activity so that the quantity, biochemical oxygen demand, chemical oxygen demand, suspended solids concentration or grease concentration of the sewage will be increased, he shall comply with Article 3.2.3 herein.
- 3.2.3 Except as provided in Article 3.2.4, the owner shall supply to the Director of Works & Utilities plans and reports certified by a professional engineer registered in the Province of British Columbia indicating:
- (a) the proposed or existing development or addition, including flow schematic drawing,
 - (b) the daily volumes and peak discharges,
 - (c) the type of waste to be processed or discharged,
 - (d) the anticipated biochemical oxygen demand and the amount of suspended solids or grease,
 - (e) the pH factor and temperature of the wastewater,
 - (f) toxic chemicals contained in the wastewater,
 - (g) the proposed pre-treatment, including dimensions of the proposed facility,
 - (h) flow equalizing or mixing facilities,
 - (i) the location of sampling manhole,
 - (j) the monitoring equipment,
 - (k) any other information deemed necessary by the Director of Works & Utilities.
- 3.2.4 The Director of Works & Utilities may deal with the application and make a decision thereon without the above information if in his opinion the nature of the application is such that a decision can be properly made without such information.
- 3.2.5 Grease and oil interceptors shall be installed as close to the source of the material as practical and provided upstream of the service connection on private property for all food preparation facilities including restaurants, canning operations, killing and processing facilities. Such interceptors shall be so located as to be readily and easily accessible for cleaning and inspection. All interceptors shall be maintained by the owner at his expense in continuously efficient operation such that all provisions of this bylaw are complied with at all times.

- 3.2.6 Grease, oil and sand interceptors shall be installed as close to the source of the material as practical and provided upstream of the service connection on private property for all vehicle repair and maintenance establishments and service stations. Interceptors will be required for other types of industries or commercial establishments as appropriate for the proper handling of liquid waste containing grease in excessive amounts or any flammable wastes, sand, grit or other harmful ingredients. Such interceptors shall be so located as to be readily and easily accessible for cleaning and inspection. All interceptors shall be maintained by the owner at his expense in continuously efficient operation at all times. These types of building services shall be connected to the sanitary sewer where available.
- 3.2.7 Separate sand traps and oil and grease interceptors shall be provided upstream of the service connection on private property for all establishments which provide car, vehicle, or equipment washing facilities. Sand traps shall be located upstream from the oil and grease interceptors, and shall have a minimum liquid depth of 1 metre and a maximum overflow rate of 8 L/m/m₂ under peak flow conditions. Sand and silt shall be removed from sand traps before these materials occupy 25 percent of the liquid depth. Accumulated oil and grease shall be skimmed off the surface of the interceptors and other sumps often enough to prevent these materials from escaping to the sewer.
- 3.3 VOLUME CONTROL**
- 3.3.1 Where wastewater is discharged into the sewerage system in volumes which are highly variable or unusual, the owner or occupier shall ensure that discharges do not exceed the limits established by the Director of Works & Utilities. The owner or occupier of the premises shall take such measures, as required by the Director of Works & Utilities, to equalize the discharge volumes and strengths.
- 3.3.2 Equipment necessary to comply with clause 3.3.1 shall be provided, maintained and operated by the owner or occupier of such premises in a manner satisfactory to the Director of Works & Utilities.

SECTION 4 - CONTROL OF INDUSTRIAL WASTES

- 4.1 SPECIAL CONTROL MANHOLES**
- 4.1.1 Any property owner or occupier discharging or likely to discharge wastewater to the public sewer which may exceed the STANDARDS FOR RESTRICTED WASTES, as deemed by the Director of Works & Utilities, shall have installed a control manhole at an accessible location and suitable for the inspection and sampling of the discharged waters.

- 4.1.2 The design and location of the control manhole shall be approved by the Director of Works & Utilities. Construction shall comply with the approved design.
- 4.1.3 The control manhole shall be installed and maintained at the sole expense of the owner of the premises and shall be accessible at all times to the District's Inspector.
- 4.1.4 All industrial wastewater discharged to public sewers shall first pass through the control manholes.
- 4.1.5 The control manhole shall conform with the District's standard sewer manhole STD-200 except that the barrel diameter shall be 1200 mm instead of 1050 mm. The standard cast iron frame and cover will be acceptable.
- The control manhole shall be located on a straight run of service extending from 3 metres upstream of the manhole to 2 metres downstream. The section of service on which the manhole is located shall have a gradient not exceeding 2 percent.
- A permanent style Palmer Bowlus flume flow meter shall be installed as an integral part of the control manhole, and shall be sized to suit the peak design flows.
- 4.1.6 Where installation of a control manhole is not possible, an alternative device or facility may be substituted for approval by the Director of Works & Utilities.

4.2 MONITORING OF WASTEWATER

- 4.2.1 Should any testing of wastewater show that it is not in compliance with this bylaw, the Director of Works & Utilities, in addition to any other provision of this bylaw may direct the owner to so comply with the bylaw and may, in addition, direct the owner at his expense to install such monitoring and recording equipment as the Director of Works & Utilities deems necessary and supply the results of such monitoring to the Director of Works & Utilities, as required.
- 4.2.2 All tests, measurements, analyses and examinations of wastewater, its characteristics or contents shall be carried out in accordance with "Standard Methods." Initial testing shall be arranged and paid for by the discharger. Additional testing or re-testing of wastewater, made necessary by non-compliance with this bylaw, or at the request of the Director of Works & Utilities, shall be carried out at the cost of the discharger.
- 4.2.3 Sampling shall be carried out by methods acceptable to the Director of Works & Utilities. Normally the analyses will be performed on samples composited by volume as per Schedule "4.E" attached to and forming part of this bylaw. Values for pH will be determined from samples composited over a short period of time.

4.3 CONTROL OF WASTE DISPOSAL

- 4.3.1 The Director of Works & Utilities may at any time require a person who intends to dispose of wastes of liquid, semi-liquid or solid nature to show proof that these wastes are being stored and subsequently disposed of in a place and

manner which is acceptable to the Director of Works & Utilities the information must also include method of packaging, storing and transporting of the waste.

- 4.3.2 The Director of Works & Utilities may require a person to provide an analysis, prepared by a qualified chemist, of the waste referred to in Article 4.3.1.

SECTION 5 - PROTECTION OF PUBLIC SANITARY SEWER SYSTEM

5.1 DISCONNECTION OF SANITARY SEWER

- 5.1.1 Where any wastewater which:

- (a) creates an immediate danger to any person, or
- (b) endangers or interferes with the operation of the sewerage system discharged to the sewer system.

The Director of Works & Utilities may, in addition to any action provided for in this bylaw, disconnect, plug or seal off the sewer line discharging the unacceptable wastewater into the sewer system or take such other action as is necessary to prevent such wastewater from entering the sewerage system.

In addition or as an alternate action, the Director of Works & Utilities may order the shut-off of water service to the subject property.

- 5.1.2 The unacceptable wastewater described in article 5.1.1 may be physically prevented from being discharged into the sewer system until evidence satisfactory to the Director of Works & Utilities has been produced to ensure that no further discharge of hazardous wastewater will be made to the sewer system.

- 5.1.3 The owner or occupier of the land from which the wastewater, described in Article 5.1.2 herein, is being discharged shall pay the costs incurred by the District in taking all necessary action relative to the sewer disconnection and/or re-connection.

- 5.1.4 The costs incurred in Article 5.1.3 shall be in addition to and not in substitution for any fine or other penalty to which the owner or occupier of the premises in question may be subject pursuant to the provisions of this bylaw.

- 5.1.5 The sewer or drain shall not be reconnected until the costs in Article 5.1.3 are paid.

5.2 RECOVERY OF COSTS FOR DAMAGE TO THE PUBLIC SANITARY SEWER SYSTEM

- 5.2.1 Where any person contravenes any provision of this bylaw and thereby causes damage to the sewer system, such person shall be liable to the District for all costs incurred in making repairs or taking remedial action.

- 5.2.2 If such costs are not paid forthwith after demand, the District may recover the same by action in any court of competent jurisdiction.

SECTION 6 - PENALTIES

6.1 PENALTIES

- 6.1.1 Every person who violates any of the provisions of this bylaw or who suffers or permits any act or thing to be done in contravention of or in violation of any of the provisions of this bylaw or who neglects to do or refrains from doing anything required to be done pursuant to any of the provisions of this bylaw, or who does any act which violates any of the provisions of this bylaw shall be guilty of an offence and each day during which such violation occurs or is allowed to continue shall constitute a separate offence.
- 6.1.2 Every person guilty of an offence against this bylaw shall be liable under summary conviction to a penalty of up to \$2,000.00 for each offence.

SECTION 7 - MASCULINE/SINGULAR

- 7.1 Wherever the masculine is used throughout this bylaw, it shall also mean the feminine; and wherever the singular is used throughout this bylaw, it shall also mean the plural.

SCHEDULE 4.A
APPLICATION FOR SANITARY SEWER



Job # _____

THE DISTRICT OF SUMMERLAND UTILITY SERVICE REQUEST FORM

Date: _____ Roll Number: _____

Name: _____ Phone Number: _____
Full Name of Owner(s)Mailing Address: _____
Street or Box Number
City Province Postal CodeLegal Description of Property: Lot(s): _____ Block: _____ District Lot: _____ Plan Number: _____
Street Address: _____ Phone Number: _____
Type of Development: _____

REQUESTED SERVICES

Sanitary Sewer	<input type="checkbox"/>	Driveway access *	<input type="checkbox"/>	Electrical: New	<input type="checkbox"/>
Domestic Water	<input type="checkbox"/>	Other _____	<input type="checkbox"/>	Service Change	<input type="checkbox"/>
				Amperage	<input type="checkbox"/>
				Voltage	<input type="checkbox"/>

* A sketch plan showing the driveway design, location and associated grades must be provided with this type of requested service as per Bylaw 92-047.

☐ Check here if there is a preferred location for any of the other requested services other than a driveway access. (If checked, a map or sketch should be attached to this utility service request form which identifies the preferred location.)

OFFICE USE ONLY

Sanitary Sewer:	_____	_____	_____	Cost Estimate	_____
	Connection size	Service line cost	Main extension cost		
Water:	_____	_____	_____	Cost Estimate	_____
	Connection size	Service line cost	Main extension cost		
Electrical:	_____	_____	_____	Cost Estimate	_____
	Temporary service	New service	Electrical surcharge		
Other:	_____	_____	_____	Cost Estimate	_____
				Total Costs	_____
Date	_____	Amount Received	_____	Signature	_____

I/We agree to be governed by the bylaws of the Corporation of the District of Summerland relative to the above requested services. **Should the actual cost of service installation exceed the above noted cost estimates, the owner(s)/agent will be responsible for the balance owing.**

Signature of owner(s)/agent: _____ Date: _____

SCHEDULE "4.B"

SANITARY SEWER REGULATIONS

1. The Waste Discharge Permit fees required under this by-law shall be paid to the District of Summerland.
2. The holder of a validated "Temporary Waste Discharge Permit" (Schedule "4.C" attached to and forming part of this bylaw) or "Waste Discharge Permit" (Schedule "4.D" attached to and forming part of this bylaw) is required to notify the issuing authority when the discharge period has terminated. If the discharge needs to continue, then an application for a new "Temporary Waste Discharge Permit" or "Waste Discharge Permit" must be submitted together with the application fee.
3. Waste Discharge Permit Fees:
 - 3.1 A Waste Discharge Application Fee as established in the District's Fees and Charges Bylaw shall be paid upon application for a "Temporary Waste Discharge Permit" or "Waste Discharge Permit".
 - 3.2 For authorized discharges to the sanitary sewer there will be a surcharge to cover the costs of treatment, plus G.S.T. The surcharge is based upon flow and load.
 - 3.3 The surcharge for authorized discharge to the sanitary sewer shall be based on the District of Summerland Fees and Charges Bylaw and amendments thereto.

SCHEDULE "4.C"
Sanitary Sewer Regulations
Temporary Waste Discharge Permit Assessment/Application Form

Mailing Address: Director of Works & Utilities,
 Box 159, Summerland, B.C. VOH IZO
 Phone: (250) 494-6451
 FAX: (250) 494-1415

Date: _____

*PLEASE ANSWER ALL QUESTIONS COMPLETELY. PRINT NEATLY OR TYPE.
 NOTE THAT ADDITIONAL INFORMATION MAY BE REQUIRED.*

1. Company Name: _____

2. Site Address: _____

3. Mailing Address: _____

4. Person to call regarding this form:

Name	Title	Phone No.
------	-------	-----------

5. Nature or type of business (brief description): _____

6. Estimate the average daily wastewater discharge:

To Sanitary Sewer	_____ m ³ /day	No. of days	_____
-------------------	---------------------------	-------------	-------

To Storm Sewer	_____ m ³ /day	No. of days	_____
----------------	---------------------------	-------------	-------

How was this estimated? _____

7. Surcharge Fee Calculation (if applicable):

_____ x _____	_____ x _____	_____ + \$100 App Fee x 1.07 GST =	_____ Total
m ³ /day	no. of days	\$/m ³	

8. Expiration date or period of discharge, if applicable:

9. Check (ü) the contaminants expected to be present in the discharge.

a)	"	Acids	b)	"	Aluminium
c)	"	Ammonia	d)	"	Boron
e)	"	Arsenic	f)	"	Cadmium

SCHEDULE "4.D"
**DISTRICT OF SUMMERLAND
WASTE DISCHARGE PERMIT**

Under the provisions of the

District of Summerland

Sanitary Sewer Regulation Bylaw No. 98-002

hereinafter referred to as the Permittee,

is authorized to discharge Non-Domestic Waste to SANITARY SEWER

located at _____

This WASTE DISCHARGE PERMIT has been issued under

the terms and conditions, including definitions,

prescribed in the District of Summerland's

Sanitary Sewer Regulation Bylaw No. 98-002

hereinafter referred to as the BYLAW

and in the attached Appendices A, B, C, D and E for discharge sources

and works existing or planned on _____

This Appendix sets out the standard conditions, engineering units, and the requirements for emergency procedures.

A. STANDARD CONDITIONS

1. Except as otherwise provided in this WASTE DISCHARGE PERMIT, hereinafter referred to as the "Permit", all terms and conditions stipulated in the Bylaw shall apply to this Permit.
2. The terms and conditions of this Permit may be amended, by the Director of Works & Utilities pursuant to the Bylaw.
3. Definitions contained within Bylaw Number 98-002 apply to this Permit.

B. ENGINEERING UNITS

The engineering units specified in this Permit are in accordance with the Metric System of measure. Approximately equivalent values for the British System can be calculated using the following conversion factors:

IGPD	divided by	220	=	M3/day
IGPM	divided by	0.22	=	l/min
cfs	divided by	35.31	=	m3/s

ppm	divided by	1	=	mg/L
lb	divided by	2.205	=	kg

Where:

m ³	=	cubic metres	IGPD	=	Imperial gallons per day
L	=	litres	IGPM	=	imperial gallons per minute
mg	=	milligrams	cfs	=	cubic feet per second
kg	=	kilograms	ppm	=	parts per million
min	=	minutes	lb	=	pounds
s	=	seconds			

C. MAINTENANCE AND OPERATION OF WORKS AND PROCEDURES

Pollution control works and procedures associated with maintaining the discharge criteria and/or the monitoring requirements specified in the Permit shall be employed at all times during the discharge of industrial/commercial wastes to sewer. All such works and procedures shall be inspected regularly and maintained in good working condition.

D. EMERGENCY PROCEDURES

In the event of an emergency or condition which prevents the continuing operation of any pollution control works or procedures designated by this Permit or results, or may result in a violation of any discharge criteria specified in this Permit, the Permittee shall notify the District of Summerland at 494-0431 regular hours or 493-0005 after hours at the first available opportunity, and shall undertake appropriate remedial action as soon as possible.

E. BY-PASSES

The discharge of wastes which by-pass any pollution control works or are not in accordance with procedures designated by the Permit is prohibited, unless prior approval of the Director of Works & Utilities is obtained and confirmed in writing.

F. DISCHARGE MONITORING

1. Additional discharge measurement, sampling, analysis and reporting shall be undertaken by the Permittee when required by the Director of Works & Utilities.
2. All sampling, measurements, tests and analyses of waste discharges shall be carried out in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, or an alternate method approved by the Director of Works & Utilities. Samples shall be analyzed by an independent agency at the expense of the discharger, unless other arrangements have been approved by the Director of Works & Utilities.

G. pH MONITORING

Enforcement of pH levels, as listed in Appendix C of this Permit, shall be based on GRAB SAMPLE. The Permittee should be aware that pH levels measured in a Composite Sample will provide an average pH of the waste stream and will not indicate

the total range of pH in the effluent. The Permittee is encouraged to do periodic GRAB SAMPLE pH analyses to ensure permit compliance.

This Appendix sets out requirements for the monitoring of the discharge of Non-Domestic Waste from a _____. Any changes in method or location of monitoring must be authorized, in writing, by the Director of Works & Utilities.

A. DISCHARGE SAMPLING AND ANALYSES

The Permittee shall carry out the following sampling and analysis program, to commence on _____.

1. Continuous Discharges

- (a) Effective _____, the Permittee shall measure or estimate, using an approved flow monitoring device or method, the daily discharge during each month of operation. The following information shall be recorded:

Total flow for the month (m³)
Number of operating days during the month
Average daily flow for the month (m³/day)
Maximum daily flow for the month (m³/day)

- (b) One Composite Sample, in accordance with Schedule E of Bylaw No. 6618-90, shall be collected from Sample Point _____, as described in Appendix B, Section B, during one normal operating day once per _____. The Composite Sample shall consist of equal portions of discrete samples collected on a minimum frequency of _____ over the period of discharge to SEWER. This sample shall be analyzed for the following parameters:

The sample start and stop times shall be recorded.

- (c) The Discharge flow for the periods that the Composite Sample specified in Section _____ are collected shall be recorded.
- (d) During the period that the Composite Sample described in Section _____ is taken, one GRAB SAMPLE shall be collected from Sample Point _____, as described in Appendix B, Section B. This GRAB SAMPLE shall be analyzed for the following parameters:

The sample date and time shall be recorded.

2. Batch Discharges

- (a) The Permittee shall maintain a log of each batch discharge to SEWER. For each month of operation, the following information shall be reported for each batch discharge:

Type of batch discharge
Volume (m³)

Date on which discharging occurred

The discharge log shall be kept available for inspection for a minimum period of one year.

(b) _____ GRAB SAMPLE(s) shall be collected from one batch discharge from the Sample Point _____, as described in Appendix B, Section B, once per _____. This sample shall represent the quality of the total batch and shall be analyzed for the following parameters:

The sampling dates and times shall be recorded.

(c) _____ GRAB SAMPLE(s) shall be collected from one batch discharge from the Sample Point _____, as described in Appendix B, Section B, once per _____. This sample shall represent the quality of the total batch and shall be analyzed for the following parameters:

(d) The Discharger shall record the total volume of each batch discharge from which the samples specified in Sections _____ are collected.

B. LOCATION OF APPROVED SAMPLE POINTS

The approved sample points are as follows, and as shown on the attached schematic of approved sample points and treatment processes. Sample point _____ is considered to be the point of discharge to SEWER.

SAMPLE POINT NO.

DESCRIPTION

Sample Point 1

Sample Point 2

**PHOTOGRAPH OF APPROVED SAMPLING POINT
SUPPLIED BY PERMITTEE**



This Appendix sets out requirements for the quantity and quality of the discharge of Non-Domestic Waste from a _____. Where a compliance program has been specified, existing works or procedures must be maintained in good operating condition and operated in a manner to minimize the discharge of contaminants during the interim period until the net works have been installed.

AUTHORIZED DISCHARGE CHARACTERISTICS

1. AUTHORIZED RATE OF DISCHARGE

The Permittee shall not exceed the following:

2. AUTHORIZED DISCHARGE CRITERIA

- a) The Permittee shall not discharge PROHIBITED WASTE as defined in Section 2.1 of the Bylaw.
- b) The Permittee shall not discharge RESTRICTED WASTE as defined in Section 2.2 of the Bylaw with the following exceptions:

<u>Parameter</u>	<u>Authorized Range or Maximum Concentration</u>	<u>Compliance By</u>
------------------	--	----------------------

- c) The Permittee shall not discharge SPECIAL WASTE as defined in Section 2.1 of the Bylaw.
- d) The Permittee shall not discharge STORM WATER or COOLING WATER as defined in Section 2.1 of the Bylaw.

This Appendix sets out the waste sources, works and procedures for the authorized discharges to SEWER. The Director of Works & Utilities may require that further works be installed if the existing works, in his opinion, do not provide an acceptable level of treatment. New works or alterations to existing works must be approved, in principle, by the Director of Works & Utilities. New waste sources must be authorized, in writing, by the Director of Works & Utilities.

AUTHORIZED WORKS AND PROCEDURES

The authorized waste sources, works and procedures to treat and/or control the waste discharge are:

	<u>SOURCE</u>	<u>COMPLETION DATE</u>	<u>WORKS & PROCEDURES</u>
1.	_____	_____	_____
2.	_____	_____	_____

REPORTING REQUIREMENTS FOR WASTE DISCHARGE PERMIT

The Permittee is required to submit the following reports to the Director of Works & Utilities:

- a) By not later than _____ and at three month intervals thereafter, the Permittee shall submit a report detailing the results of the discharge sampling and analysis program for the preceding _____ as specified in Appendix B, Sections _____.
- b) By not later than _____, the Permittee shall submit a written report outlining the specifications of the flow monitoring device or method used to determine the flow rate as described in Appendix B, Section A.1 of this Permit.

Additional reporting shall be undertaken by the Permittee when required by the Director of Works & Utilities.

Schedule "4.E"
Evaluation of Wastewater

Flow Proportioned Sampling

Proper sampling techniques are essential for accurate testing in evaluation of wastewater. To be representative of the entire flow, samples should be taken where the wastewater is well mixed.

An instantaneous grab sample represents conditions at the time of sampling only, and cannot be considered to represent a longer time period, since the character of a wastewater is usually not stable.

A composite sample is a mixture of individual grabs proportioned according to the wastewater flow pattern. Compositing is commonly accomplished by collecting individual samples at regular time intervals, for example, every hour on the hour, and by storing them in a refrigerator or ice chest; coincident flow rates are read from an installed flow meter or are determined from some other flow recording device. A representative sample is obtained by mixing together portions of individual samples relative to flow rates at sampling times.

Composite samples representing specified time periods are tested to appraise plant performance and loadings. Weekday specimens collected over a 24-hour period are most common. Average daily BOD, TSS, and Oil & Grease data are used to calculate plant yield treatment efficiencies. Integrated samples during the period of peak flow, usually 8 to 12 hr. depending on influent variation, allow determination of maximum loadings on treatment units.

Example:

Hourly samples were taken of wastewater entering a treatment system. The following equations illustrate the portions to be used from the hourly grabs to provide composite samples for the 24-hr duration and during the period of maximum 8-hr loading, between 9 A.M. and 5 P.M. The composite sample volumes needed for laboratory testing are approximately 2500ml.

Calculations for the portions of hourly samples to be used in compositing are tabulated as follows:

		Portions of Hourly Samples					
		in Millilitres for:					
Time	Flow (gpm)	24-hr Composite				8-hr Composite	
Midnight	490	0.15	x	490	=	74	
1 A.M.	420	0.15	x	420	=	63	
2 A.M.	360	0.15	x	360	=	54	
3 A.M.	310	0.15	x	310	=	47	
4 A.M.	290	0.15	x	290	=	43	
5 A.M.	310	0.15	x	310	=	46	
6 A.M.	390	0.15	x	390	=	58	
7 A.M.	560	0.15	x	560	=	84	
8 A.M.	620	0.15	x	620	=	93	
9 A.M.	900	0.15	x	900	=	135	$0.3 \times 900 = 270$
10 A.M.	1040	0.15	x	1040	=	156	$0.3 \times 1040 = 310$
11 A.M.	1130	0.15	x	1130	=	170	$0.3 \times 1130 = 340$
Noon	1160	0.15	x	1160	=	174	$0.3 \times 1160 = 350$
1 P.M.	1120	0.15	x	1120	=	168	$0.3 \times 1120 = 340$
2 P.M.	1060	0.15	x	1060	=	159	$0.3 \times 1060 = 320$
3 P.M.	1000	0.15	x	1000	=	150	$0.3 \times 1000 = 300$
4 P.M.	950	0.15	x	950	=	143	$0.3 \times 950 = 290$
5 P.M.	910	0.15	x	910	=	136	
6 P.M.	870	0.15	x	870	=	130	
7 P.M.	810	0.15	x	810	=	121	
8 P.M.	760	0.15	x	760	=	114	
9 P.M.	690	0.15	x	690	=	103	
10 P.M.	630	0.15	x	630	=	94	
11 P.M.	540	0.15	x	540	=	81	
Total composite sample volumes		2596 ml				2520 ml	