
Waste Discharge Permit Application

Greater Vancouver Sewerage & Drainage District
Sewer Use Bylaw No. 299, 2007



This is an application for a **Waste Discharge Permit** under the Greater Vancouver Sewerage and Drainage District (GVS&DD) Sewer Use Bylaw No. 299, 2007. A link to GVS&DD Sewer Use Bylaw No. 299, 2007 is available at:

http://www.metrovancouver.org/boards/bylaws/Bylaws/GVSDD_Bylaw_299.pdf

NEW PERMIT APPLICATION FEE

Application Type	Fee
Industrial Site	\$1000

PERMIT AMENDMENT APPLICATION FEES

Application Type	Fee
Minor Amendment	\$250
Major Amendment	\$500

A minor amendment is an amendment that is limited to the following:

- name and legal address changes;
- monitoring program changes;
- a decrease in the quantity of contaminants or flow authorized;
- a change to the authorized discharge such that, in the opinion of the Sewage Control Manager, there would be equal or less demand for regulatory and treatment services; or
- a change in the authorized works or measures such that, in the opinion of the Sewage Control Manager, there would be equal or less demand for regulatory and treatment services.

A major amendment is any amendment that is not a minor amendment.

Please enclose a cheque for the applicable amount, payable to the **City of Vancouver**.

GENERAL INSTRUCTIONS

- ◆ Provide all required information and attachments.
- ◆ If you do not have an answer for the requested information, indicate so and explain why.
- ◆ Indicate 'n/a' if a section does not apply to your application.
- ◆ Use additional pages, as required.
- ◆ Send the completed application form, attachments and the application fee to the following address:

City of Vancouver
Environmental Protection
#320 - 507 West Broadway
Vancouver, BC V5Z 0B4

Telephone: 311
or: (604) 873-7000
Email: environmentalprotection@vancouver.ca

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SECTION A: BUSINESS NAME AND ADDRESS

APPLICANT BUSINESS NAME (Registered Company Name):	INCORPORATION NUMBER:
SITE ADDRESS:	BUSINESS MAILING ADDRESS:
_____ (Street)	_____ (Street)
_____ (City/Province)	_____ (City/Province)
_____ (Postal Code)	_____ (Postal Code)

CONTACT PERSON REGARDING THIS APPLICATION:

_____ (Name)	_____ (Title)
_____ (Company Name)	_____ (Postal Code)
_____ (Street Address)	_____ (Telephone)
_____ (City/Province)	_____ (Fax)
	_____ (E-mail)

Applicants must **attach the results of a corporate registry search**, conducted within 30 days of this applications submission date. The corporate registry search indicates that the applicant business has been registered with the BC Ministry of Finance. Corporate registry searches can be obtained for a nominal fee from:

- BC Online at: <https://www.bconline.gov.bc.ca/>
- By visiting the Provincial Courthouse at 800 Hornby Street (small claims desk).
- By Mailing your written request, and a cheque for \$10 to Suite 100, 800 Hornby St. Vancouver B.C., attn: Cashier. The cheque should be made out to the Ministry of Finance.

SECTION B: PROCESS DESCRIPTION

Summarize the manufacturing processes that are conducted at your facility, including the raw materials used and products produced.

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(use additional pages if necessary)

SECTION C: OPERATING PERIOD

Specify the typical operating period for your operation (when process wastewater is discharged to the sanitary sewer):

Hours/Day	Days/Week	Weeks/Year

Specify the typical number of hours of discharge of process wastewater discharge to the sanitary sewer during the following shifts:

08:00 to 16:00	16:00 to 24:00	0:00 to 08:00

If your operation is seasonal, estimate the average number of days of process wastewater discharge to the sanitary sewer per season:

Spring	Summer	Fall	Winter

SECTION D: WASTEWATER SOURCES

Describe all sources of non-domestic wastewater discharged to the sanitary sewer, including process wastewater, plant wash water, cooling water, boiler blow down, contaminated storm waste, etc. Indicate whether the discharge is batch or continuous. Estimate the daily volume of wastewater generated. Identify each source on the Schematic Flow Diagram and Site Layout (Attachments A and B).

Source #	Wastewater Source Description	Continuous or Batch?	Daily Volume (m ³)
1	<i>Example: Three product cooking kettles - sauces are prepared in the kettles and then transferred to filling line for packaging. Wastewater is generated from cleaning of kettles twice per day.</i>	<i>Batch</i>	25

(use additional pages if necessary)

SECTION E: WASTEWATER TREATMENT

Describe the wastewater treatment works that you are currently using, or proposing to use, to treat individual or combined wastewater streams prior to discharge to sewer. Identify each treatment process on the Schematic Flow Diagram and Site Layout (Attachments A and B).

Please include the following with your treatment works description:

- Flow diagram of your treatment processes;
- Justification of the works based on wastewater quality data, results from other similar installations, and/or scientific evidence from literature demonstrating performance;
- Basic design criteria and sizing calculations for the treatment system components;
- Type and quantity of treatment chemicals used;
- Maintenance procedures to be carried out to ensure integrity of the works;
- Provisions to bypass the treatment works;
- Collection and disposal of any treatment byproducts (e.g. waste solids).

Dotted lines for text entry.

(use additional pages, if necessary)

SECTION F: SAMPLE POINT LOCATION

A sampling point must be designated for each process wastewater connection to the sanitary sewer system. It is essential that the sampling location does not include any domestic waste. The sampling point must be downstream of the final treatment process and complete mixing must have occurred. Identify the sample point location(s) in the Site Layout (Attachment B).

Please describe the proposed sampling point(s) below. Include an explanation of how samples collected at these locations will be representative of the wastewater discharged to sanitary sewer.

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(use additional pages, if necessary)

SECTION G: SPILL PREVENTION AND CONTAINMENT

Summarize the provisions taken to prevent spills from entering the sanitary sewer system:

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(use additional pages, if necessary)

SECTION H: WASTEWATER CLASSIFICATION AND QUALITY

Use the check boxes to indicate whether any of the following types of wastes, as defined in Section 2.1 (Page 1) and Schedule "A" of the Bylaw, are discharged to sanitary sewer.

PROHIBITED WASTES, STORM OR UNCONTAMINATED WATER	Yes (√)	No (√)
STORM WATER		
UNCONTAMINATED WATER		
FLAMMABLE OR EXPLOSIVE WASTE		
WASTE CAUSING OBSTRUCTION OR INTERFERENCE		
WASTE CAUSING AIR POLLUTION		
HIGH TEMPERATURE CREATING WASTE (>65°C)		
RADIOACTIVE WASTE		
BIOMEDICAL WASTE		
SPECIFIED RISK MATERIAL FOR BOVINE SPONGIFORM ENCEPHALOPATHY		

Use the check boxes to indicate whether any of the following types of wastes, as defined in Schedule "B" of the Bylaw, are discharged to sanitary sewer. When present, please provide estimates of the concentration of each contaminant before and after treatment. Provide actual data wherever possible.

RESTRICTED WASTES Units expressed as mg/L, except as noted.	Yes (√)	No (√)	Before Treatment (Maximum Concentration or Range)	After Treatment (Maximum Concentration or Range)
PARTICLE SIZE WASTE (>0.5 cm in any dimension)				
pH WASTE (pH units)				
SPECIFIED WASTE (Expressed as Total Concentrations)				
BIOCHEMICAL OXYGEN DEMAND				
TOTAL SUSPENDED SOLIDS				
TOTAL OIL AND GREASE				
OIL AND GREASE (Hydrocarbons)				
Aluminum				
Arsenic				
Boron				
Cadmium				
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Manganese				
Mercury				
Molybdenum				
Nickel				
Selenium				
Silver				
Zinc				
Cyanide				
Phenols				
Chlorinated Phenols				
Sulphate				
Sulphide				

SECTION H: WASTEWATER CLASSIFICATION AND QUALITY CONTINUED

OTHER WASTE Units expressed as mg/L, except as noted.	Yes (√)	No (√)	Before Treatment (Maximum Concentration or Range)	After Treatment (Maximum Concentration or Range)
Conductivity				
Chemical Oxygen Demand				
Dissolved Organic Halogen				
Formaldehyde				
Ammonia				
Styrene				
Total Benzene/Ethylbenze/Toluene/Xylenes				
◆ Benzene				
◆ Ethylbenzene				
◆ Toluene				
◆ Xylenes				
Total Polynuclear Aromatic Hydrocarbons				
Total Polychlorinated Biphenyls				
Carbon Tetrachloride				
Trichloroethylene				
Tetrachloroethylene				
Vinyl Chloride				

HAZARDOUS WASTES	Yes (√)	No (√)
Does your wastewater discharge contain Hazardous Waste, <u>prior to</u> treatment?		
Does your wastewater discharge contain Hazardous Waste, <u>following</u> treatment?		

If Yes to either of the above, detail (on a separate page) the provisions taken to comply with Column 3 of Schedule 1.2 (Standard for Discharges Directed to Municipal or Industrial Effluent Treatment Works) of the Hazardous Waste Regulation. Please provide supporting information and analytical data.

SECTION I: FLOW INFORMATION

1. Requested Discharge Flow Rates

The following process flow information is required to complete both City of Vancouver sewer line and GVS&DD trunk sewer line hydraulic loading capacity evaluations.

Total Plant Site Area: _____ acres; or _____ m²

Maximum Daily Discharge Rate: _____ m³/day

Maximum Instantaneous Peak Flow Rate: _____ litres/second

Maximum Discharge Duration: _____ hours/day _____ days/week _____ weeks/year

2. Discharge Flow Rate Estimation Methods

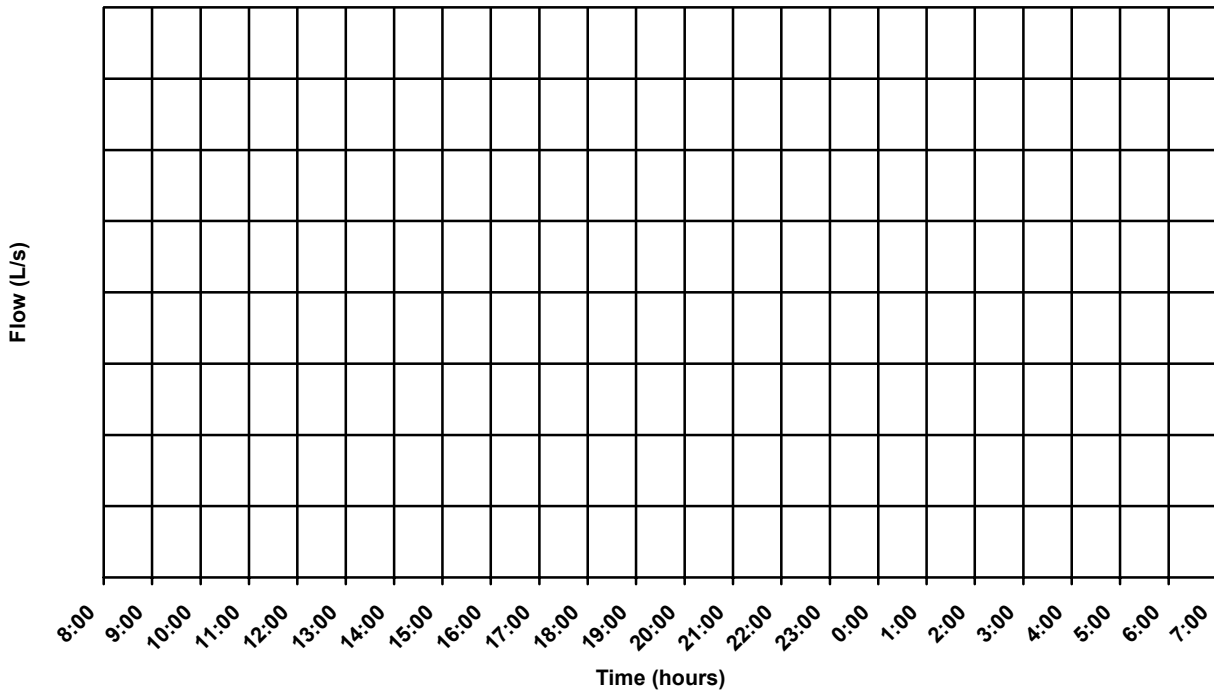
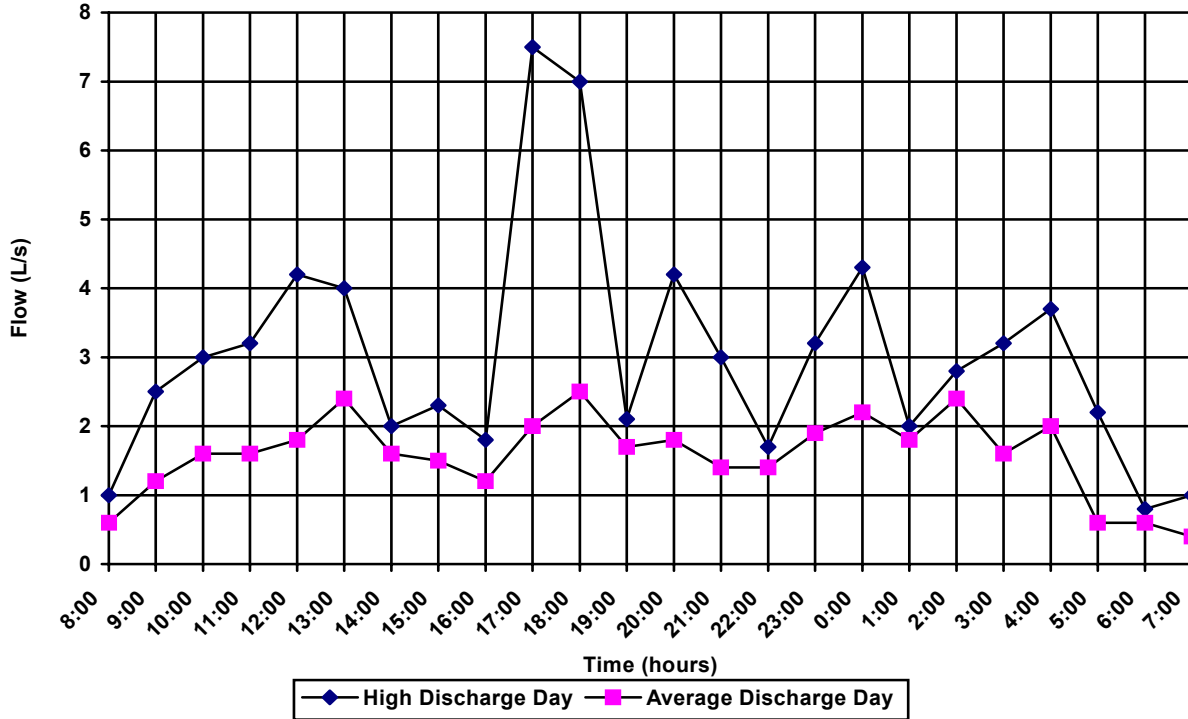
Indicate the method(s) used to estimate the discharge flow rates. Provide the additional information required for the method(s) used.

(√)	Method	Additional Information Required
	Water Meter Usage Records	Provide details of your flow estimation calculation. <i>e.g. (incoming water meter usage value) minus (water incorporated into product) minus (domestic waste consumption - 0.1 m³ / day / person) = daily discharge volume</i>
	Discharge Pump Capacity	Provide all supporting calculations, including pump and pipe specifications, assumptions, etc.
	Discharge Pipe Capacity	Provide all supporting calculations, including pipe diameters and slopes, assumptions, etc.
	Flow Measurement	Describe the flow monitoring/recording equipment used. Provide specifications, if available.

SECTION I: FLOW INFORMATION CONTINUED

3. Discharge Flow Rate Profile

Provide a graphic representation of a 24 hour profile of the instantaneous flow rate from your operation on both average and high discharge days, as per the following example:



SECTION J: REQUESTED PERMIT TERM

Please indicate in the appropriate box below the length of time that you will require a Waste Discharge Permit.

	(√)		(√)
Less than 7 days		181 - 270 days	
7 - 30 days		271 - 365 days	
31 - 90 days		Ongoing	
91 - 180 days			

SECTION K: REQUIRED ATTACHMENTS

Attachment A: Schematic Flow Diagram

The schematic flow diagram should be a simple line drawing illustrating production/process steps at your facility, with particular emphasis on the processes that generate wastewater and their associated pretreatment systems. Your diagram should include:

- each plant process that generates wastewater (number each waste source);
- additional schematics of each wastewater pretreatment process;
- process water flow lines
- wastewater flow lines
- sewer discharge points for each waste stream.

Attachment B: Site Layout

The site layout locates each activity and process in a geographical setting. The site layout, at minimum, should include:

- building outlines;
- property lines;
- north arrow;
- wastewater drainage/collection / treatment systems;
- locations of any continuous monitoring equipment (pH, conductivity, flow meters, etc.);
- sample point location(s);
- discharge points to sewer.

Both of the attachments should be no smaller than 8.5 x 11 inches and no larger than 11 x 17 inches.

For examples of Attachments A & B, please refer to Pages 12 and 13 of this application.

SECTION L: DECLARATION

This application form must be signed by a representative of the company listed as the applicant in Section A, who will be responsible for complying with all terms and conditions of the Waste Discharge Permit.

I declare that the information given on this form is correct and accurate to the best of my knowledge.

..... <i>Name (please print)</i> <i>Title</i>
..... <i>Signature</i> <i>Date</i>

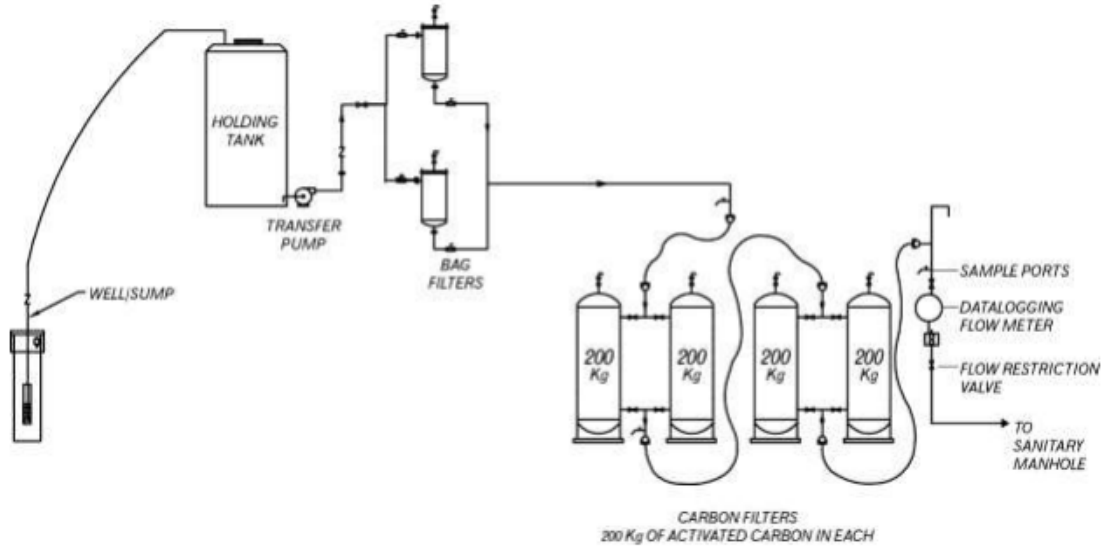
If you elect to appoint another company employee or consultant as the primary contact for this application, please complete the following:

I hereby authorize the following representative to deal with all aspects of the subject application.

..... <i>Name (please print)</i> <i>Title</i>
..... <i>Affiliation</i> <i>Telephone Number</i>
..... <i>E-mail</i> <i>Fax Number</i>

ATTACHMENT A: EXAMPLE OF SCHEMATIC FLOW DIAGRAM

Example Process Flow Diagram



ATTACHMENT B: EXAMPLE OF SITE LAYOUT

