# **Waste Discharge Permit Application**

# for

# Commercial, Industrial and Institutional Discharges





This is an application for a <b>Waste Discharge Permit</b> under the City of Prince George Sanitary Sewer Use Bylaw # 9055 to discharge wastewater to sanitary sewer from industrial and commercial sources.
Please enclose a cheque in the amount of \$100.00, payable to the City of Prince George, for payment of the Waste Discharge Permit application fee.
Once deemed complete, your application will be subject to a 60 day review by the City of Prince George to evaluate the impact of the proposed hydraulic loading on the City of Prince George's sanitary sewer system. If the proposed hydraulic loading is acceptable, the City of Prince George will advise you of the amount of the municipal discharge fee, in accordance with City of Prince George Comprehensive Fees and Charges Bylaw #7557.
□ Application for New Permit □ Application to Amend Permit □ Permit Renewal No

#### **GENERAL INSTRUCTIONS**

- Please refer to the Sanitary Sewer Use Bylaw # 9055 for information on responsibilities of Industrial Users, Discharge permits, and other pertinent information.
- 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 Prince George Manager, Utilities Division 3990 - 18<sup>th</sup> Avenue Prince George BC V2N 4R8

Telephone: (250) 561-7550 Facsimile: (250) 561-7519



# **Application Contents**

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ATTACHMENT A: Example of Schematic Flow Diagram

ATTACHMENT B: Example of 24 Hour Flow Rate Profile



#### SECTION A: DEFINITIONS

"Applicant"

means an owner or his agent, being a person authorized in writing to act on behalf of the owner, making application for a permit.

"BOD"

denoting Biochemical Oxygen Demand, BOD being the quantity of oxygen utilized in the biochemical oxidation of organic substances under standard laboratory procedures in five (5) days at 20 degrees Celsius expressed in milligrams per litre, as determined by the procedure described in Standard Methods for the Examination of Water and Wastewaters, Current Edition, as amended from time to time.

"Food Waste"

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

"Owner"

Means, an owner of real property as defined in the Community Charter, as amended.

"Pretreatment or Treatment" means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing the pollutants into a publicly owned treatment plant.

"Service Connection" means the section of sanitary sewer pipe and related fixtures on public property by which a building sewer is connected to the sanitary system.

"Sewage"

means water carried wastes from residences, buildings, business premises, institutions and industrial establishments, and includes:

- a) "Industrial Waste" meaning the wastes from industrial, commercial and institutional processes;
- b) "Sanitary Sewage" meaning that portion of sewage that does not include Industrial Waste.

"Sewer"

means a pipe including manholes and other appurtenances other than a service connection in the Sewer System.

"Sewer System"

means all sanitary sewerage works and appurtenances, including sewers, service connections, pumping stations, treatment plants, sewage lagoons and sewer outfalls laid in any highway, municipal right-of-way easement, or other City interest in real property.

"Waste Discharge Permit" means a permit issued by the Authorized Person under Section 9 of the Sanitary Sewer Use Bylaw # 9055 specifying the terms and conditions for discharging of wastewater into a public sewer or private sewer discharging into a public sewer.

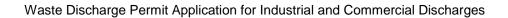


SECTION B: APPLICANT INFORMATION	<u> </u>
Applicant Business Name (Registered Company Name)	Incorporation Number
City of Prince George Business License #	<b></b>
Site Address (Street)	Business Mailing Address (Street)
Site City / Province	Business City / Province
Site Postal Code	Business Postal Code
SECTION C: SITE HISTORY	
ummarize the business activities and/or ma	anufacturing processes on the property.
se additional pages if necessary)	
hat is the source of water for the site?	
$\square$ City $\square$ Other Specify:	



# SECTION D: NATIONAL POLLUTANT RELEASE INVENTORY DATA

Does your business expect to submit to the National Pollutant Release Inventory (https://www.ec.gc.ca/inrp-npri/)? If yes, this data should also be submitted to the City of Prince George by July 1st of each year.					
□ Yes □ No					
SECTION E: WASTEWATER QU	JALI	TY			
Type of Discharge					
☐ Continuous ☐ Batch	1		Both		
Quality					
Use the check boxes to indicate v	vheth	ner any	of the foll	owing types of wastes are discharged:	
Flammable or explosive waste		Yes		No	
Obstructive waste		Yes		No	
High temperature waste		Yes		No	
Corrosive waste		Yes		No	
Biomedical waste		Yes		No	
Food waste		Yes		No	
Radioactive waste		Yes		No	
Air Contaminant		Yes		No	
Excessive Foaming		Yes		No	
Pharmaceuticals		Yes		No	
High BOD Waste		Yes		No	
Waste containing Lignin and Tannins		Yes		No	
Waste containing Resin Acids		Yes		No	





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Sno	וכוח	w	2610
JUE	GIQ.	~~	aste

(Note connection locations on attached site plan.)

Waste Regulation	of the <i>Environm</i> c.ca/gov/conten	ental Management	iste as defined under <i>Act</i> , British Columbia e-management/haza	λ.			
□ Yes □	□ No □	□ Don't Know					
Number of Conne	ctions to Sewe	er					
(a) Sanitary Sewe	r						
Domestic waste o	nly						
Non-domestic was	ste only						
Combined domestic and non-domestic waste (Note connection locations on attached site plan.)							
Is uncontaminated	d water discharg	ged to sanitary sewe	er?				
Yes □ volun	ne	m3/dav	No □				

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#### **Wastewater Characteristics**

In the space provided below, check the appropriate box for each wastewater contaminant to dictate whether the contaminant listed is "known to be present", "suspected to be present", "suspected to be absent", or "known to be absent" in the wastewater discharge after treatment.

If a contaminant is "known to be present" or "suspected to be present", estimate the expected average and maximum daily contaminant concentrations in the spaces provided. If wastewater discharges have been sampled and analyzed in the past, please attach examples of sampling data.

Wastewater Contaminants	to be present	to be present	to be absent	to be absent	Expected Concentration mg/L (ppm)	
Inorganic Contaminants	•				Average	Maximum
Aluminum						
Antimony						
Arsenic						
Boron						
Cadmium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Manganese						
Mercury						
Molybdenum						
Nickel						
Selenium						
Silver						
Tin						
Zinc						



Wastewater Contaminants	Known to be present	Suspected to be present	Suspected to be absent	Known to be absent	Expected Co mg/L (ppm)	ncentration
Other Inorganic Contaminants	<b>P</b>	<b>P</b>			Average	Maximum
Chlorides						
Cyanide						
Nitrogen, Total Kjeldahl						
Phosphorous						
Sulphide						
Sulphate						
Other						_
Organic <u>Contaminants</u>						
Benzene						
Chlorophenols						
Dichlorobenzene (1,2 -)	П	П	П	П		
Dichlorobenzene (1,4 -)						
Dichloromethane (Methylene Chloride)						
Ethyl Benzene						
Phenols (total)						
Polycyclic Aromatic Hydrocarbons (PAH)						
PCB's						
Pesticides						
Tetrachloroethylene						
Toluene						
Trichloroethylene						
Xylenes						
Solvents (specify)						



Wastewater Contaminants	Known to be present	Suspecte d to be present	Suspected to be absent	Known to be absent	Expected Concentration (ppm)	n mg/L
Conventional Contaminants		•				
Biochemical Oxygen Demand (BOD)						
Carbonaceous Biochemical Oxygen Demand (CBOD)						
Chemical Oxygen Demand (COD)						
Suspended Solids (Total)						
Oil and Grease (hydrocarbons)						
Oil and Grease (total)						
pH max						
pH min						



SECTION F: FLOW INFORMATION	
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#### 1. Requested Discharge Flow Rates

Specify the proposed operating period in which the wastewater will be discharged to the City's

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the typical number of	hours of discharge to the sanitary	sewer during the follow
:		
08:00 to 16:00	16:00 to 24:00	0:00 to 08:00

The following process flow information is required to complete the sanitary sewer line nydraulic loading capacity evaluations.

Hours/Day	Days/Week	Weeks/Yea	r
Maximum discharge duration:			
Maximum instantaneous peak	flow rate:	_ litres/second	
	After treatment		m <sup>3</sup> /day
Maximum daily discharge rate:	Before treatment		m <sup>3</sup> /day
	After treatment		m³/day
Average Daily Discharge Rate	Before treatment		m <sup>3</sup> /day
Total discharge volume over th	e requested term of the Permit:		_ m <sup>3</sup>

# 2. Maximum Possible Discharge Flow Rates

In some cases, the discharge capability may exceed typical requirements (for example, if a spare pump is operated at the same time as the main pump). Specify the maximum possible discharge rates, even if there is no intention to discharge at these rates.



Maximum potential daily discharge rate:	m³/day
Maximum potential instantaneous peak flow rate:	litres/second

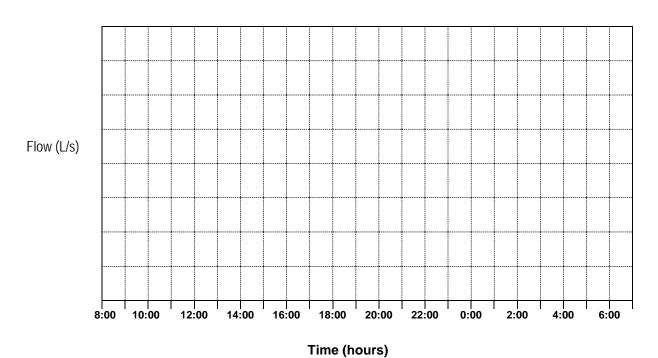
#### 3. Discharge Flow Rate Estimation Methods

Indicate the method used to estimate the discharge flow rates and provide the supporting information specified.

(√)	Method	Additional Information Required
	Discharge Pump Capacity	Provide pump specifications and all supporting calculations, assumptions, etc.
	Flow Measurement	Provide specifications for the flow monitoring and recording equipment used.

## 4. Discharge Flow Rate Profile

Please provide a graphic representation of a 24 hour profile of the instantaneous flow rate from the industrial/commercial activities on both average and high discharge days (see example on page 20: Attachment B).





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#### SECTION G: WASTEWATER TREATMENT

Describe the wastewater treatment works that will be utilized to treat the wastewater prior to discharge to the City's sanitary sewer. Please include the following:

- Basic design criteria and sizing calculations for the treatment system components.
- The maximum design flow rate for the treatment works.
- Justification of the works based on wastewater quality data, results from other similar installations and/or scientific evidence from literature demonstrating performance.
- Maintenance procedures to be carried out to ensure integrity of the works.
- Any provisions to bypass the treatment works.
- Method(s) of disposal of any treatment byproducts.
- A schematic flow diagram, identifying wastewater sources, collection, piping, treatment works, instrumentation, sampling point, and the point of connection to the City's sanitary sewer (see example on page 19: Attachment A).

e additional pages if necessary)	_



# SECTION H: SPILL PREVENTION AND CONTAINMENT

(use additional pages if necessary)



#### SECTION I: FLOW CURTAILMENT PROCEDURES

The Permit holder may be required to immediately curtail or cease the discharge to sewer upon receiving notice from the City of Prince George. This may occur at any time during the term of the Permit.

coi the	ntacted 24 contact	4 hours/da	ay by the C s) and te	City of Prin	ice George	in the ev	ent of such mal workin	a conditio	n. Include

## **SECTION J: REQUESTED PERMIT TERM**

Please indicate in the appropriate box below the length of time that you will require a Waste Discharge Permit (**Note: the maximum term for a discharge permit is three years**, with the annual Waste Discharge Administration Fee due on the renewal date).

Duration	(X)
1 year	
2 years	
3 years	
Other	



#### **SECTION K: DECLARATION**

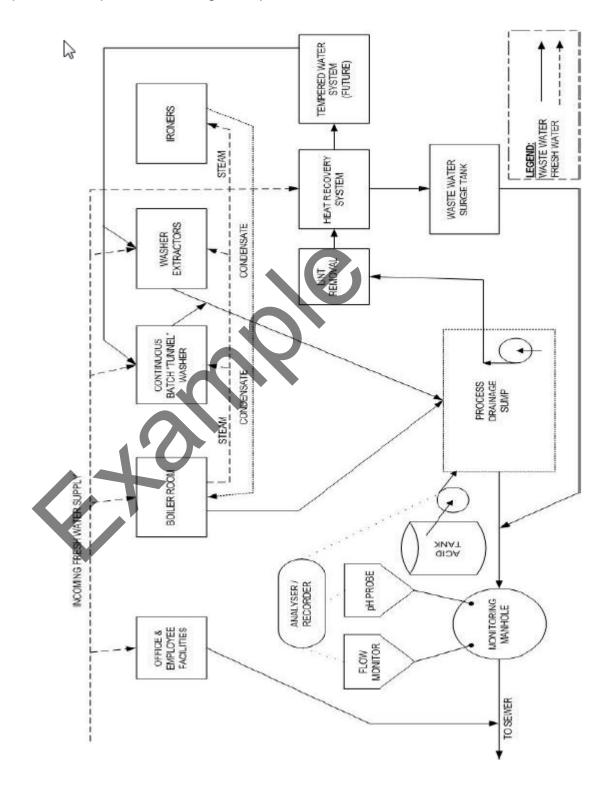
This application form <u>must be signed</u> by an authorized representative of your company who will be responsible for complying with all terms and conditions of the Waste Discharge Permit. The authorized representative also acknowledges that they remain at all times responsible for ensuring that any waste discharged to any sewer connected to sewage treatment or disposal facilities operated by the City of Prince George complies with all applicable enactments and agrees to release, indemnify and save harmless the City of Prince George, its officers employees and agents from any and all liability whatsoever arising out of such discharge or the granting of a Waste Discharge Permit.

of my knowledge.		
Name (please print)	Titl	e
Telephone	Fa:	X
Signature	Dat	e
If you elect to appoint another company emploapplication, please complete the following:	oyee or consultant as the p	orimary contact for this
Primary Contact Information		
Name (please print)	Title	
Company Name (if Consultant)	Telephone	Fax



# ATTACHMENT A: EXAMPLE OF A SCHEMATIC FLOW DIAGRAM

As described in section G: Wastewater Treatment, provide a flow diagram specific to your operation, as per the following *example:* 





#### ATTACHMENT B: EXAMPLE OF A 24 HOUR FLOW RATE PROFILE

As described in Section F: Flow Information, point 4, 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:* 

