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Waste Discharge Permit Application for Temporary Dewatering and Construction Excavation Sites

GENERAL INSTRUCTIONS

This information sheet is provided to assist you in the preparation and submission of an application for a waste discharge permit under the Capital Regional District's (CRD) Sewer Use Bylaw No. 5, 2001 (Bylaw 2922) and its amendments.

Please send the completed application form, signed declaration form and attachments to the address below **90 days prior** to the date a permit is required. Electronic versions can be sent by email. Specifications and drawings of process equipment and control works associated with the discharge should be submitted to assist the CRD with the evaluation of the application. The Sewage Control Manager may request additional details relevant to the application.

Please refer to Attachment D: Checklist for Completed Application

FEES

New Permit Application Fee \$500

An invoice for the application fee will be issued upon issuance of the permit. Cheques for application fees should be made payable to the Capital Regional District and delivered to the address below.

CONTACT INFORMATION

Regional Source Control Program
Capital Regional District
625 Fisgard Street, PO Box 1000
Victoria, BC V8W 2S6

Telephone: 250.360.3256

Email: sourcecontrol@crd.bc.ca

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SECTION A: CONTACT INFORMATION

1. APPLICANT

The applicant should be the person or business that is the owner of the waste and responsible for Permit compliance. If issued, the Waste Discharge Permit will name the applicant as the "Permittee." The Permittee will be the subject of enforcement measures, if required. If more than one person or business is responsible for the waste, or if the applicant engages another party or parties to be responsible for operation and monitoring of the authorized treatment works in compliance with the Waste Discharge Permit, then the co-applicant(s) can also be named as a Permittee.

| | | | |
|------------------|---|----------------|-------------------|
| Applicant | Name/Registered Company Name _____ | | |
| | Hereby does apply for a Waste Discharge Permit to discharge non-domestic waste into the sanitary sewer from an excavation dewatering project. | | |
| | Mailing Address _____ | | |
| | City _____ | Province _____ | Postal Code _____ |
| CONTACT | Name _____ | | Job Title _____ |
| | Telephone _____ | Cell _____ | Email _____ |

If there is more than one applicant, please attach the above-noted information for each applicant.

2. PROPERTY OWNER

Is the property owner the same as applicant: Yes No

If No, then please complete the table below and provide proof that the property owner is aware of and has given consent for the proposed activities.

| | | | |
|-----------------------|------------------------------------|----------------|-------------------|
| Property Owner | Name/Registered Company Name _____ | | |
| | Mailing Address _____ | | |
| | City _____ | Province _____ | Postal Code _____ |
| CONTACT | Name _____ | | Job Title _____ |
| | Telephone _____ | Cell _____ | Email _____ |

3. AGENT

The person or business completing the application form on behalf of the applicant. If the person or business completing this application is acting as an Agent and is expressly authorized to act on behalf of the Applicant, then Section G of this application form must also be completed.

Same as applicant/owner: Yes No If No, then please complete the table below.

| | | | |
|----------------|---|----------------|-------------------|
| AGENT | Business Name (Registered Company Name) _____ | | |
| | Business Mailing Address _____ | | |
| | City _____ | Province _____ | Postal Code _____ |
| CONTACT | Name _____ | | Job Title _____ |
| | Telephone _____ | Cell _____ | Email _____ |

SECTION B: EMERGENCY CONTACTS

In the event of excess hydraulic loading to the sanitary sewerage facilities, the Permit holder may be required to immediately curtail or cease the discharge to sewer, including normal working hours, evenings, weekends and holidays. Please provide the contact information for a person and an alternate that are capable of curtailing or stopping the discharge to sanitary sewer.

| | PRIMARY | ALTERNATE |
|---------------------------------------|---------|-----------|
| Contact person | | |
| Company name | | |
| Title or position | | |
| 24-hour emergency telephone number(s) | | |
| Business telephone | | |
| Business cell number | | |
| Email | | |

(Use additional pages, if necessary)

SECTION C: PROJECT INFORMATION

1. SITE LOCATION

| | |
|------|--|
| SITE | Site Address _____ |
| | Site Contact (if different than above) _____ Telephone _____ |
| | Municipality _____ |

2. ALTERNATIVE DISPOSAL OPTIONS

The applicant is responsible for determining whether any regulatory restrictions apply to the proposed waste discharge. Are there any federal or provincial statutes and/or regulations, CRD or municipal bylaws that would prohibit the discharge of treated effluent from this project to the storm sewer or environment? (For example, CRD Saanich Peninsula Stormwater Source Control Bylaw No. 4168). If so, please explain why discharge to the sanitary sewer is required below.

(Use additional pages if necessary)

3. PROJECT OVERVIEW

Provide a brief description of the project and explain why discharge to the sanitary sewer is required. Summarize the remedial and/or excavation activities planned for the site. Attach a site plan and cross section showing the horizontal and vertical extents of the excavation(s) relative to the water table, if known.

(Use additional pages if necessary)

4. DISCHARGE SOURCE(S)

What is the source of the discharge?

SECTION D: SITE HISTORY

1. SITE INVESTIGATION REPORTS

Has a BC *Contaminated Sites Regulation Site Profile* been provided to the municipality? Yes No

Has a phase 1/stage 1 preliminary site investigation been conducted? Yes No

Has a phase 2/stage 2 preliminary and/or detailed site investigation been conducted? Yes No

2. SUBSURFACE CONDITIONS

Summarize soil and hydro-geological conditions described by a geotechnical or contaminant investigation report prepared for the site, if available. Include a description of the soil layers, depths to groundwater and the estimated or measured hydraulic conductivities. Please attach a site plan and cross section drawings showing the depth to groundwater, or selected logs of boreholes, wells, and/or piezometers.

(Use additional pages if necessary)

3. INFILTRATION RATES

The expected yield from recovery wells and/or infiltration rates to collection trenches, sumps and/or open excavations must be determined or estimated in order to appropriately size treatment works proposed for the site. Precipitation falling directly on the excavation during a one in five year storm event must also be included in the estimate. Please describe the methods used to calculate the yield from wells or the expected infiltration rates to sumps, trenches and excavations and attach the calculations.

(Use additional pages if necessary)

4. ANALYTICAL RESULTS

Please attach, as available:

- A site plan and cross sections showing soil and groundwater sample locations.
- Tabulated analytical results for groundwater or pre-treatment samples compared to the limits established by Schedules A & B of CRD Sewer Use Bylaw No. 2922.
- Raw laboratory analytical results for the above.

SECTION E: FLOW INFORMATION

1. REQUESTED PERMIT TERM

Please indicate the maximum length of time that you will require a Waste Discharge Permit: _____

2. OPERATING PERIOD

Specify the proposed period during which wastewater is discharged to the sanitary sewer:

| Hours per Day | Days per Week |
|---------------|---------------|
| | |

Will the discharge be:

- greater than 300 m³ in a 30 day period? Yes No
- greater than 10 m³ in a 24-hour period? Yes No
- Continuous Batch Both

3. REQUESTED DISCHARGE FLOW RATES

The requested flow rates must consider the predicted well yield and/or the excavation dewatering requirements including precipitation falling directly on the open excavation during a one in five year storm event. Estimate the dewatering requirements and attach the calculations.

The following flow information is required to complete both Municipal sewer line and CRD trunk sewer line hydraulic loading capacity evaluations.

| | | |
|--|-------|---------------------|
| Total discharge volume over the requested term of the Permit: | _____ | m ³ |
| Maximum daily discharge date during dry weather conditions: | _____ | m ³ /day |
| Maximum daily discharge rate during a one-in-five-year rainfall condition: | _____ | m ³ /day |
| Maximum instantaneous peak flow rate during dry weather conditions: | _____ | L/s |
| Maximum instantaneous peak flow rate during a one-in-five-year rainfall condition: | _____ | L/s |

4. DISCHARGE POINT

Attach a plan showing the location of the proposed discharge point to sanitary sewer.

Please also identify the connection point to the CRD trunk sewer line. You may need to contact your municipality to assist in obtaining this information.

Municipal Manhole No.: _____

CRD Connection Manhole ID: _____

SECTION F: TREATMENT WORKS

1. DESCRIPTION OF TREATMENT WORKS

Treatment works must be appropriately sized to ensure protection of the sanitary sewer infrastructure from excessive contaminant and hydraulic loading. The treatment works must also include a means to continuously monitor, regulate and record discharge rates to the sanitary sewer system. An electronic flow meter and data logger are recommended for this purpose.

Describe the treatment system that will be utilized and discuss the basic chemical and physical processes involved. List the primary components of the proposed treatment works.

(Use additional pages if necessary)

Attach a schematic flow diagram identifying the size and capacity of the various attenuation or settling tanks, filters, pumps, piping, sample ports, and the point of connection to sewer (Example in Attachment C). This flow diagram will be included in the body of the Permit.

List the flocculants, coagulants and/or other process chemicals that will be used, if applicable. Attach the MSDS sheets for these products.

(Use additional pages if necessary)

2. BASIC DESIGN CRITERIA

The treatment works need to be properly sized for the expected flow rate. Therefore, provide the basic design values used for the proposed treatment system. Discuss any assumptions or approximations used and attach the calculations. You may need to engage the services of an environmental professional for assistance with this work. Describe how the applicant will ensure the permitted maximum daily discharge volume, the maximum instantaneous peak flow rate and total permitted discharge volume over the term of the Permit will not be exceeded and/or will be moderated as necessary.

(Use additional pages if necessary)

SECTION G: APPLICANT DECLARATION

The applicant affirms that all information provided in this application is accurate to the best of their knowledge and that any incorrect information can result in denial of this application. The applicant also understands that the CRD has the right at any time and for any reason to revoke the waste discharge permit and the applicant waives all right to claim for damages as a result of business interruption or negligence claims as a result of permit cancellation.

| | |
|---|--------------|
| I, _____ (Print name), have read and agree to the terms presented under this application. | |
| _____ | _____ |
| Title | Phone Number |
| _____ | _____ |
| Signature of Applicant | Date |

If you elect to appoint an **Agent**, please also complete the following:

| | |
|--|--------------|
| I, _____ (Print name), hereby authorize: | |
| _____ (Print name) of _____ (Affiliation) | |
| to deal with CRD staff directly on all aspects of the subject application. | |
| _____ | _____ |
| Title | Phone Number |
| _____ | _____ |
| Signature of Applicant | Date |

If there is more than one applicant, please attach the above-noted information, with signature(s) on a separate page for each applicant. The collection of this information is authorized under the Capital Regional District Sewer Use Bylaw (Bylaw No. 2922) and Sections 29 and 30 of the *Environmental Management Act* and will be used for the purpose of administration, including enforcement, of the Sewer Use Bylaw and orders made pursuant to the *Environmental Management Act*.

Enquiries about the collection or use of information on this form can be directed to the Manager, Information Services at 250.360.3639.

SCHEDULE "A"

**PROHIBITED WASTE
BYLAW NO. 2922**

Prohibited waste means:

1. Hazardous Waste

Hazardous waste as defined by the Environmental Management Act. *(Bylaw 3350)*

2. Air Contaminant Waste

Any waste other than sanitary waste which, by itself or in combination with another substance, is capable of creating, causing or introducing an air contaminant outside any sewer or sewage facility or is capable of creating, causing or introducing an air contaminant within any sewer or sewage facility which would prevent safe entry by authorized personnel.

3. Flammable or Explosive Waste

Any waste, which by itself or in combination with another substance, is capable of causing or contributing to an explosion or supporting combustion in any sewer or sewage facility including, but not limited to gasoline, naphtha, propane, diesel, fuel oil, kerosene or alcohol.

4. Obstructive Waste

Any waste which by itself or in combination with another substance, is capable of obstructing the flow of, or interfering with, the operation or performance of any sewer or sewage facility including, but not limited to: earth, sand, sweepings, gardening or agricultural waste, ash, chemicals, paint, metal, glass, sharps, rags, cloth, tar, asphalt, cement-based products, plastic, wood, waste portions of animals, fish or fowl and solidified fat.

5. Corrosive Waste

Any waste with corrosive properties which, by itself or in combination with any other substance, may cause damage to any sewer or sewage facility or which may prevent safe entry by authorized personnel.

6. High Temperature Waste

(a) Any waste which, by itself or in combination with another substance, will create heat in amounts which will interfere with the operation and maintenance of a sewer or sewage facility or with the treatment of waste in a sewage facility;

(b) Any waste which will raise the temperature of waste entering any sewage facility to 40 degrees Celsius (104 degrees Fahrenheit) or more;

(c) Any non-domestic waste with a temperature of 65 degrees Celsius (149 degrees Fahrenheit) or more.

7. Biomedical Waste

Any of the following categories of biomedical waste: human anatomical waste, animal waste, untreated microbiology laboratory waste, clinical and laboratory waste sharps and untreated human blood and body fluids known to contain viruses and agents listed in "Risk Group 4" as defined in the Transportation of Dangerous Goods Regulations.

(Bylaw 3105)
(Bylaw 3350)

8. Miscellaneous Wastes

Any waste, other than sanitary waste, which by itself or in combination with another substance:

- (a) constitutes or may constitute a significant health or safety hazard to any person;
- (b) may interfere with any sewer or sewage treatment process;
- (c) may cause a discharge from a sewage facility to contravene any requirements by or under any permit issued under the Environmental Management Act or any other act, approved Liquid Waste Management Plan, or any other law or regulation governing the quality of the discharge, or may cause the discharge to result in a hazard to people, animals, property or vegetation;
(Bylaw 3350)
- (d) may cause biosolids to fail criteria for beneficial land application in British Columbia as set out in the Organic Matter Recycling Regulation (British Columbia) deposited February 2002, or may cause the emissions from a wastewater sludge combustion facility to be out of compliance with appropriate permits, or may cause the ashes from a wastewater sludge combustion facility to be considered a hazardous waste under the Environmental Management Act.
(Bylaw 3105)
(Bylaw 3350)

SCHEDULE "B"

**RESTRICTED WASTE
BYLAW NO. 2922**

Restricted waste means:

1. Specified Waste

Any waste which, at the point of discharge into a sewer, contains any contaminant at a concentration in excess of the limits set out below. All concentrations are expressed as total concentrations which includes all forms of the contaminant, whether dissolved or undissolved. The concentration limits apply to both grab and composite samples. Contaminant definitions and methods of analysis are outlined in standard methods or methods specified by the manager.

Any of the contaminants listed below in tables (a), (b) or (c) that are present in a waste at dissolved concentrations in excess of the Hazardous Waste Regulation Leachate Quality Standards will qualify that waste, regardless of the sampling method used, as a hazardous waste. *(Bylaw 3350)*

| a) CONVENTIONAL CONTAMINANTS [mg/L] | |
|-------------------------------------|------|
| Biochemical Oxygen Demand (BOD) | 500 |
| Chemical Oxygen Demand (COD) | 1000 |
| Oil and Grease* | 100 |
| Suspended Solids | 350 |

Note: *Total oil and grease includes oil and grease (hydrocarbons) (see table (b))

| b) ORGANIC CONTAMINANTS [mg/L] | |
|---|------|
| Benzene | 0.1 |
| Ethyl Benzene | 0.2 |
| Toluene | 0.2 |
| Xylenes | 0.2 |
| Polynuclear Aromatic Hydrocarbons (PAH)** | 0.05 |
| Phenols | 1 |
| Oil and Grease (hydrocarbons) | 15 |

Note: **Polynuclear Aromatic Hydrocarbons (PAH) include:

| | |
|----------------|------------------------|
| naphthalene | benzo(a)anthracene |
| acenaphthylene | chrysene |
| acenaphthene | benzo(b)fluoranthene |
| fluorene | benzo(k)fluoranthene |
| phenanthrene | benzo(a)pyrene |
| anthracene | dibenzo(a,h)anthracene |
| fluoranthene | indeno(1,2,3-cd)pyrene |
| pyrene | benzo(g,h,i)perylene |

| (c) INORGANIC CONTAMINANTS [mg/L] | |
|-----------------------------------|------|
| Arsenic (As) | 0.4 |
| Cadmium (Cd) | 0.3 |
| Chloride (Cl) | 1500 |
| Chromium (Cr) | 4 |
| Cobalt (Co) | 5 |
| Copper (Cu) | 1 |
| Cyanide (CN) | 1 |
| Iron (Fe) | 50 |
| Lead (Pb) | 1 |
| Manganese (Mn) | 5 |
| Mercury (Hg) | 0.02 |
| Molybdenum (Mo) | 5 |
| Nickel (Ni) | 3 |
| Selenium (Se) | 0.3 |
| Silver (Ag) | 0.5 |
| Sulphate (SO ₄) | 1500 |
| Sulphide (S) | 1 |
| Zinc (Zn) | 3 |

2. Food Waste

Any non-domestic waste from cooking and handling of food that, at the point of discharge into a sewer, contains particles larger than 0.5 centimetres in any dimension.

3. Radioactive Waste

Any waste containing radioactive materials that, at the point of discharge into a sewer, exceeds radioactivity limitations as established by the Canadian Nuclear Safety Commission.

(Bylaw 3016)

4. pH Waste

Any non-domestic waste which, at the point of discharge into a sewer, has a pH lower than 5.5 or higher than 11.0, as determined by either a grab or a composite sample.

5. Dyes and Colouring Material

Dyes or colouring materials which may pass through a sewage facility and discolour the effluent from a sewage facility except where the dye is used by the District, or one or more of its municipalities, as a tracer.

6. Miscellaneous Restricted Wastes

Any of the following wastes as defined in the bylaw.

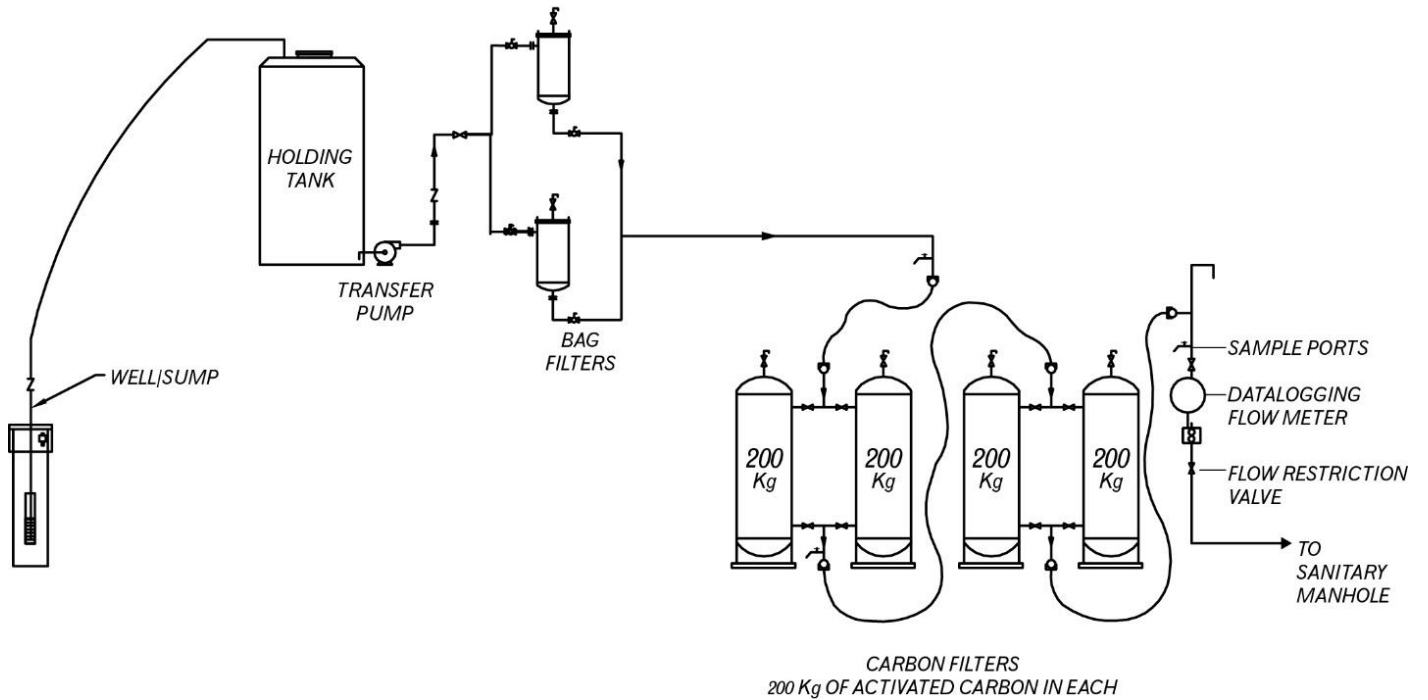
- (a) seawater
- (b) PCBs
- (c) chlorinated phenols ***
- (d) pesticides
- (e) tetrachloroethylene
- (f) organo-tin compounds

(Bylaw 3350)

*** Chlorinated phenols include:

- chlorophenol (ortho, meta, para)
- dichlorophenol (2,3, 2,4-, 2,5-, 2,6-, 3,4-, 3,5-)
- trichlorophenol (2,3,4-, 2,3,5-, 2,3,6-, 2,4,5-, 2,4,6-, 3,4,5-)
- tetrachlorophenol (2,3,4,5-, 2,3,4,6-, 2,3,5,6-)
- pentachlorophenol

Example Process Flow Diagram



ATTACHMENT D: CHECKLIST FOR COMPLETED APPLICATION

CHECKLIST FOR COMPLETED APPLICATION

- All necessary contact information
- Proof of property owner consent
- Site plan and cross section drawings showing:
 - soil and groundwater conditions
 - groundwater sample locations and depths
 - the dimensions of the proposed excavation
 - extraction wells, sumps or well point configuration
 - sanitary sewer discharge point or connection
- Excavation infiltration and dewatering rate calculations or report
- Tabulated analytical results compared with the criteria in CRD Sewer Use Bylaw No. 2922
- Raw analytical results
- Documentation that other disposal options have been denied by Municipal or Provincial authority
- A schematic flow diagram of proposed treatment works
- MSDS sheets for flocculants and other consumables
- A 24-hour flow rate estimate
- Section G signed by the applicant and/or their agent

If this form and necessary attachments are incomplete, it will result in a delay in processing.