



**metrovancover**

Greater Vancouver Regional District • Greater Vancouver Water District

Greater Vancouver Sewerage and Drainage District • Metro Vancouver Housing Corporation

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*Policy & Planning Department  
Tel. 604-432-6200 Fax 604-436-6707*

**WASTE DISCHARGE PERMIT**  
**No. SC-100100-FSA**  
(the "Permit")

Under the provisions of the  
Greater Vancouver Sewerage & Drainage District Sewer Use Bylaw No. 299, 2007 (as amended)  
(the "Bylaw")

**Shell Canada Limited**  
(the "Permittee")

is authorized to discharge Wastewater to Sewer from  
a petroleum products storage & distribution terminal located at

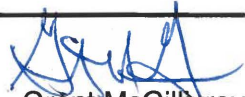
**201 Kensington Avenue, Burnaby, BC**

This Permit has been issued under the terms and conditions prescribed in the attached  
Schedules A, B, C, D and E for discharge services and works existing or planned on

**July 01, 2011**

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Issued: October 01, 1992  
Amended: June 30, 2011

  
Grant McGillivray  
Deputy Sewage Control Manager

**GREATER VANCOUVER SEWERAGE & DRAINAGE DISTRICT**

**SCHEDULE A**

This Schedule sets out requirements for the quantity and quality of the discharge to Sewer.

**1. AUTHORIZED RATE OF DISCHARGE**

The Permittee shall not exceed the following:

**Sample Point: 1**

- Maximum daily discharge flow rate: **3100.00 m<sup>3</sup>/day**
- Maximum instantaneous peak flow rate: **51.70 L/second**

**2. AUTHORIZED DISCHARGE CRITERIA**

- a) The Permittee shall not discharge Restricted Waste or other Waste, as defined in the Bylaw, including but not limited to the following (regardless of sample type):

Parameter	Authorized Limit	Notes
Total Suspended Solids	600 mg/L	
Sulphate	1500 mg/L	
Benzene	0.1 mg/L	
Polycyclic Aromatic Hydrocarbons	0.05 mg/L	
Total BETX	1 mg/L	
Chromium - total	4 mg/L	
Lead - total	1 mg/L	
Zinc - total	3 mg/L	

- b) The Permittee shall not discharge Restricted Waste or other Waste, as defined in the Bylaw, with the following exceptions (regardless of sample type):

Parameter	Authorized Limit	Notes
pH	6 - 10.5 pH Units	
Biochemical Oxygen Demand	No Limit	
Total Suspended Solids	50 mg/L	Average concentration/quarter
Oil & Grease Hydrocarbon	20 mg/L	
Cyanide	0.4 mg/L	
Sulphide	2 mg/L	
Sulphide	0.5 mg/L	Average concentration/quarter
Temperature	50 Degrees C	
Total BETX	0.5 mg/L	Average concentration/quarter

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**SCHEDULE A**

- c) The Permittee shall not discharge Prohibited Waste, Storm Water or Uncontaminated Water, as defined in the bylaw, with the exception of the following storm water sources: tank levee drains (when contaminated) including roof drains, and dock slop water.
- d) The Permittee shall not discharge Hazardous Waste, or effluent from the treatment of Hazardous Waste which exceeds the Effluent Standards for Hazardous Waste Facilities, as stipulated in Schedule 1.2, Column 3, of the BC Environmental Management Act Hazardous Waste Regulation.

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**GREATER VANCOUVER SEWERAGE & DRAINAGE DISTRICT**

**SCHEDULE B**

This Schedule sets out requirements and locations for the approved sample points, waste sources, and works and procedures to treat and/or control the discharges to Sewer.

**1. SAMPLE POINTS, WASTE SOURCES, WORKS & PROCEDURES**

**SAMPLE POINT: 1**

This sample point is considered to be a point of discharge to Sewer. The approved sample point location is described and is illustrated in the photo(s) below.

**Description:**

1(a) Composite samples: The sample "T" on the effluent discharge line plumbed to the automatic composite sampler located within the composite sampler building.

1(b) Grab samples: The insulated grab sample line on the effluent discharge line immediately adjacent to and below the main GVS&DD discharge valve to sanitary sewer.

**Source: All Plant Sources**

- Rail Tank car loading racks
- Tank truck loading racks
- Tank levee drains (when contaminated) including roof drains
- Dock slop water
- Oil water collection system (if contaminated)
- Lower yard deep drainage system
- All authorized petroleum products handling facility sources

Type: Continuous

<b>Works and Procedures</b>	<b>Completion Date</b>
API separators (optional treatment)	Completed
TPI wastewater plant	Completed
Air flotation units	Completed
Final effluent storage tanks	Completed
Continuous flow monitoring and recording	Completed
Good operating practices	Completed

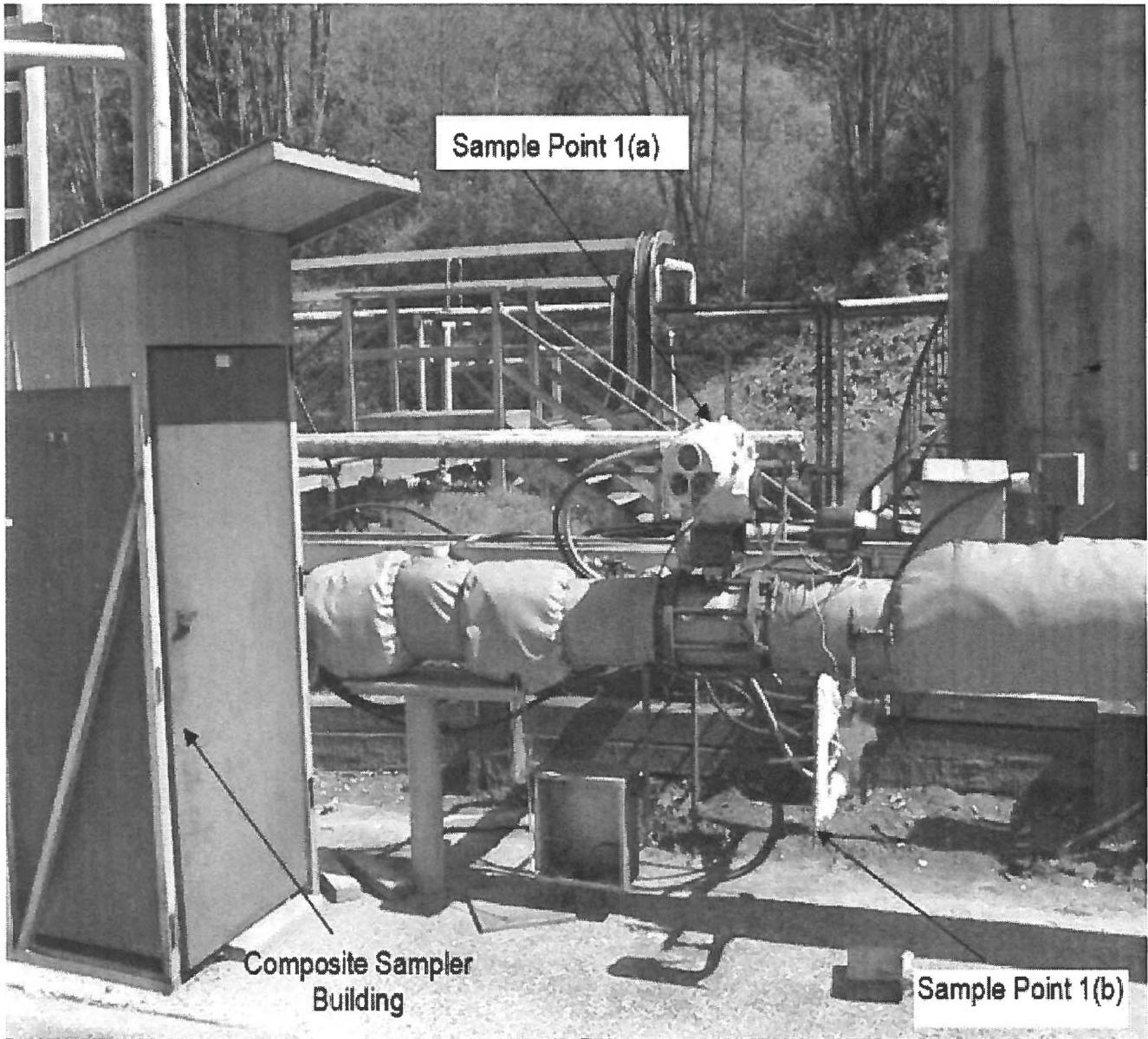
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**SCHEDULE B**

**Photograph of Sample Point 1:**



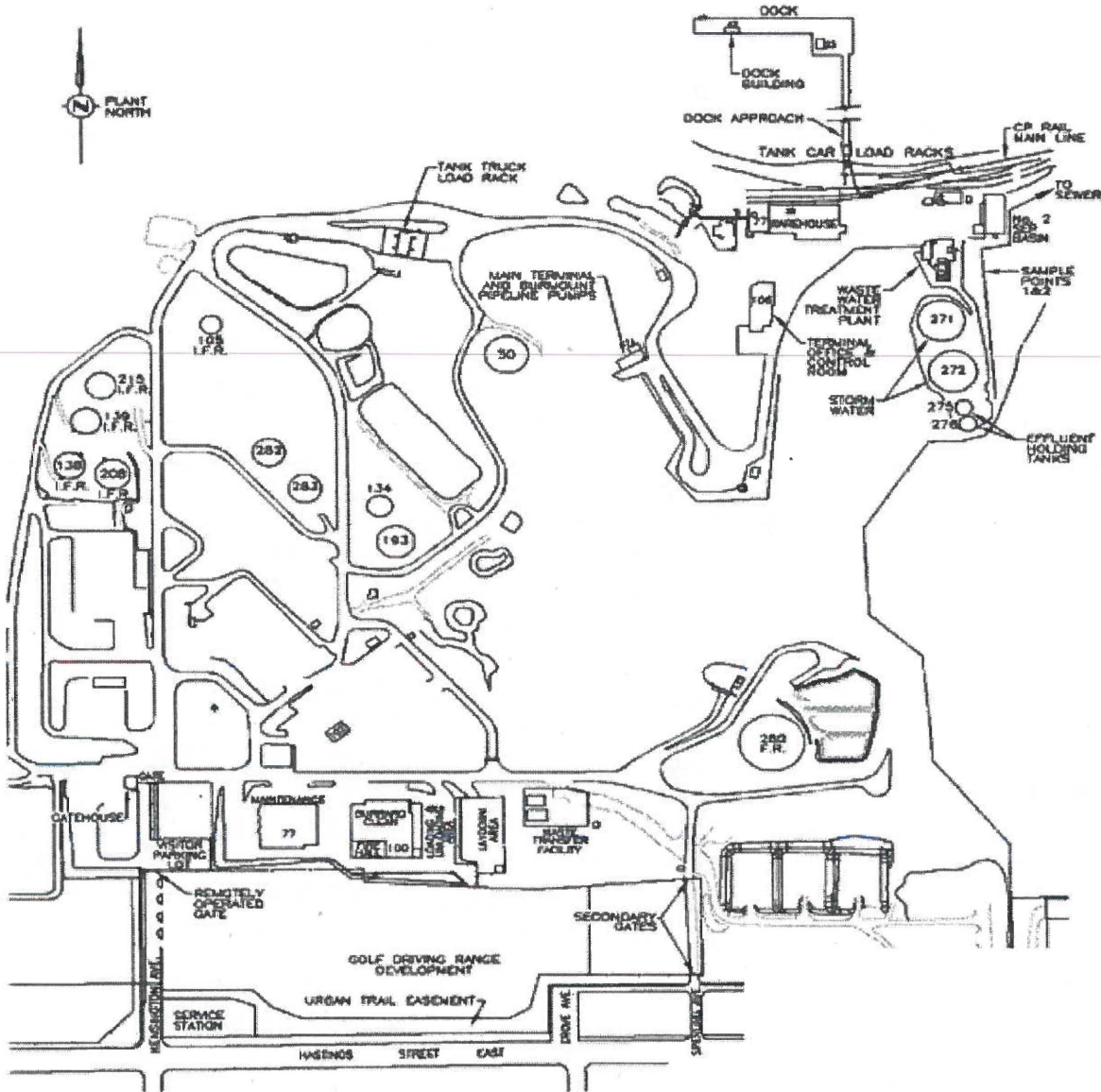
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**SCHEDULE B**

**2. SITE PLAN(S)**



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**SCHEDULE C**

This Schedule sets out standard conditions and requirements for emergency procedures.

**1. STANDARD CONDITIONS**

- a) Except as otherwise provided in this Permit, all terms, conditions and definitions stipulated in the Bylaw shall apply to this Permit.
- b) Pursuant to the Bylaw, the Sewage Control Manager (the Manager) may amend the terms and conditions of this Permit.
- c) All records required by this permit shall be kept available for a minimum period of one year.

**2. WORKS AND PROCEDURES**

- a) All authorized works, procedures and requirements shall be employed at all times during any discharge to sewer. As applicable, all such works shall be inspected and calibrated regularly and maintained in good working condition.
- b) The Manager may require that additional works be installed if the existing works do not provide an acceptable level of treatment. The Manager must authorize new works or alterations to existing works. The Manager must authorize new waste sources.

**3. NOTIFICATION PROCEDURES**

The Permittee shall immediately report to Metro Vancouver at 604-643-8488 (24 hours):

- a) Spills with the potential to be discharged to the Sanitary Sewer.
- b) Failure of authorized works or conditions and/or failure to carry out authorized procedures that will or have the potential to result in a Permit limit being exceeded.
- c) Discharge pH less than 2 or greater than 12.5.

**4. BY-PASSES**

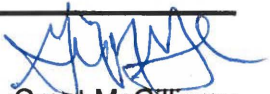
The discharge of Wastes that by-pass any authorized works or is not in accordance with procedures designated by the Permit is prohibited, unless prior authorization of the Manager is obtained.

**5. DISCHARGE MONITORING**

- a) 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 authorized by the Manager. With the exception of pH measurements, all samples shall be analyzed by an independent laboratory unless otherwise authorized by the Manager.
- b) Laboratories used by the Permittee must be accredited by the Canadian Association for Laboratory Accreditation.
- c) Any changes in method or location of monitoring must be authorized by the Manager.
- d) Additional monitoring and/or reporting shall be undertaken by the Permittee when required by the Manager.

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**SCHEDULE D**

This Schedule sets out the requirements for the monitoring of the discharge to Sewer.

**DISCHARGE SAMPLING AND ANALYSES: Effective July 01, 2011**

**1. FLOW MEASUREMENTS**

The Permittee shall measure or estimate the discharge flow to sanitary sewer during each month of operation using the approved method(s) and record for reporting purposes the following:

- Total discharge volume (m<sup>3</sup>) for the month for sample point(s) 1
- Number of days of discharge to sewer during the month for sample point(s) 1
- Maximum daily discharge flow rate (m<sup>3</sup>/day) during the month for sample point(s) 1
- Maximum instantaneous flow rate (L/second) during the month for sample point(s) 1

**2. SAMPLING PROGRAM**

**Continuous Discharge Sampling:**

The Permittee shall record for reporting purposes for each sample the following:

- Sample date
- Sample collection time or sample collection start and stop time(s) if applicable
- Total daily discharge volume (m<sup>3</sup>) on the date of sampling

**SAMPLE POINT: 1**

**Continuous Discharges:**

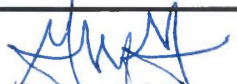
On one normal operating day once per month collect 1 set of composite samples from Sample Point 1(a) and analyze for:

- Biochemical Oxygen Demand
- Total Metals by ICP Scan including:  
Aluminum, Arsenic, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead,  
Manganese, Molybdenum, Nickel, Selenium, Silver, Zinc

On one normal operating day once per month collect 1 set of grab samples from Sample Point 1(b) and analyze for:

- Benzene
- Ethylbenzene
- Toluene
- Xylenes

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**GREATER VANCOUVER SEWERAGE & DRAINAGE DISTRICT**

**SCHEDULE D**

On one normal operating day once per week collect 1 set of composite samples from Sample Point 1(a) and analyze for:

- Total Suspended Solids
- Sulphate

On one normal operating day once per week collect 1 set of grab samples from Sample Point 1(b) and analyze for:

- pH
- Oil & Grease Hydrocarbon
- Cyanide
- Sulphide

On one normal operating day once per quarter collect 1 set of grab samples from Sample Point 1(b) and analyze for:

- Polycyclic Aromatic Hydrocarbons

Grab sample pH analysis must be conducted immediately upon sampling.

Unless otherwise specified, composite samples shall consist of equal portions of grab samples, collected at a frequency of at least one per hour during discharge to sewer.

If composite sampling is specified, grab samples shall be taken during the period of composite sampling unless noted otherwise in this Schedule.

Unless otherwise specified, all samples should be taken during normal operations.

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**SCHEDULE E**

This Schedule sets out reporting requirements for this Permit.

**1. REPORTING REQUIREMENTS**

**By October 31, 2011 and quarterly thereafter for the term of this permit:**

The Permittee shall submit a report detailing the results of the discharge sampling and analyses program, as specified, for the previous calendar quarter including lab reports.

Should a violation of any term or condition of the Permit be noted, the report shall include a summary of the investigation into the cause of the violation and the corrective actions taken or proposed to prevent future violations. This does not preclude the immediate notification requirements specified in Schedule C.

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