



## WASTE DISCHARGE PERMIT NO. SC-100012-VSA

**Pursuant to:**

Greater Vancouver Sewerage & Drainage District Sewer Use Bylaw No. 299, 2007 (as amended)  
and the BC Environmental Management Act, S.B.C. 2003, c.53

**Issued to:**

Air Canada  
(the "Permittee")

**To Authorize:**

the discharge of Wastewater to Sewer from  
an aircraft and vehicle maintenance facility

**Located at**

6001 Grant McConachie Way, Richmond, BC V7B 1K3

**Effective Period:**

The terms and conditions set out in the Permit apply to the existing or planned works on  
February 09, 2018

All previous versions of this Waste Discharge Permit are hereby rescinded and rendered null and void.

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Issued: October 31, 1991  
Amended: February 09, 2018

  
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: **800.00 m<sup>3</sup>/d**
- Maximum instantaneous peak flow rate: **15.00 L/s**

**Additional Conditions:**

A maximum instantaneous flow rate of 52.80 L/s is only permitted during routine testing of the Fire Pump System.

**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
pH	5.5 - 10.5 pH Units	
Total Suspended Solids	600 mg/L	
Oil & Grease Hydrocarbon	15 mg/L	
Total Oil & Grease	150 mg/L	
Cyanide	1 mg/L	
Sulphate	1500 mg/L	
Sulphide	1 mg/L	
Chlorophenols	0.05 mg/L	
Phenols	1 mg/L	
Aluminum - total	50 mg/L	
Arsenic - total	1 mg/L	
Boron - total	50 mg/L	
Cadmium - total	0.2 mg/L	
Chromium - total	4 mg/L	
Cobalt - total	5 mg/L	
Copper - total	2 mg/L	
Iron - total	10 mg/L	
Lead - total	1 mg/L	

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**GREATER VANCOUVER SEWERAGE & DRAINAGE DISTRICT**

**SCHEDULE A**

Parameter	Authorized Limit	Notes
Manganese - total	5 mg/L	
Molybdenum - total	1 mg/L	
Nickel - total	2 mg/L	
Selenium - total	1 mg/L	
Silver - 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
Biochemical Oxygen Demand	No Limit	

- c) The Permittee shall not discharge Prohibited Waste, Storm Water or Uncontaminated Water, as defined in the bylaw.
- 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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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: One manhole downstream from the junction manhole where all effluent is combined into a single flow at the west side of the site.

Source: Combined Plant Effluent Discharge

Type: Continuous

Works and Procedures	Completion Date
Flow monitoring by estimation based on incoming water	Completed

Source: Equipment Cooling Water

Type: Continuous

Works and Procedures	Completion Date
Good operating practices	Completed

Source: Facility Floor Wash

Type: Continuous

Works and Procedures	Completion Date
Oil water separator	Completed
Good operating practices	Completed

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**GREATER VANCOUVER SEWERAGE & DRAINAGE DISTRICT**

**SCHEDULE B**

**Source: Fire Pump Testing**

Routine testing run once a week  
Annual fire hydrant testing  
Annual fire-fighting system pressure test

Type: Continuous

Works and Procedures	Completion Date
Good operating practices	Completed

**Source: Firefighting Foam System**

Emergency discharge during a fire or accidental tripping

Type: Continuous

Works and Procedures	Completion Date
Good operating practices	Completed

**Source: Flight Kitchen**

Type: Continuous

Works and Procedures	Completion Date
Collection sumps	Completed
Grease interceptors	Completed

**Source: Ground Services Equipment and Vehicle Wash**

Type: Continuous

Works and Procedures	Completion Date
Oil water separator	Completed
Good operating practices	Completed

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**SCHEDULE B**

**Source: Power Plant**

Boiler water blow-down  
Contaminated cooling water

Type: Continuous

<b>Works and Procedures</b>	<b>Completion Date</b>
Collection system	Completed

**Source: Tarmac Aircraft Washwater**

Type: Continuous

<b>Works and Procedures</b>	<b>Completion Date</b>
Holding tank	Completed
Oil/water separation	Completed

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SCHEDULE B

Photograph of Sample Point 1:



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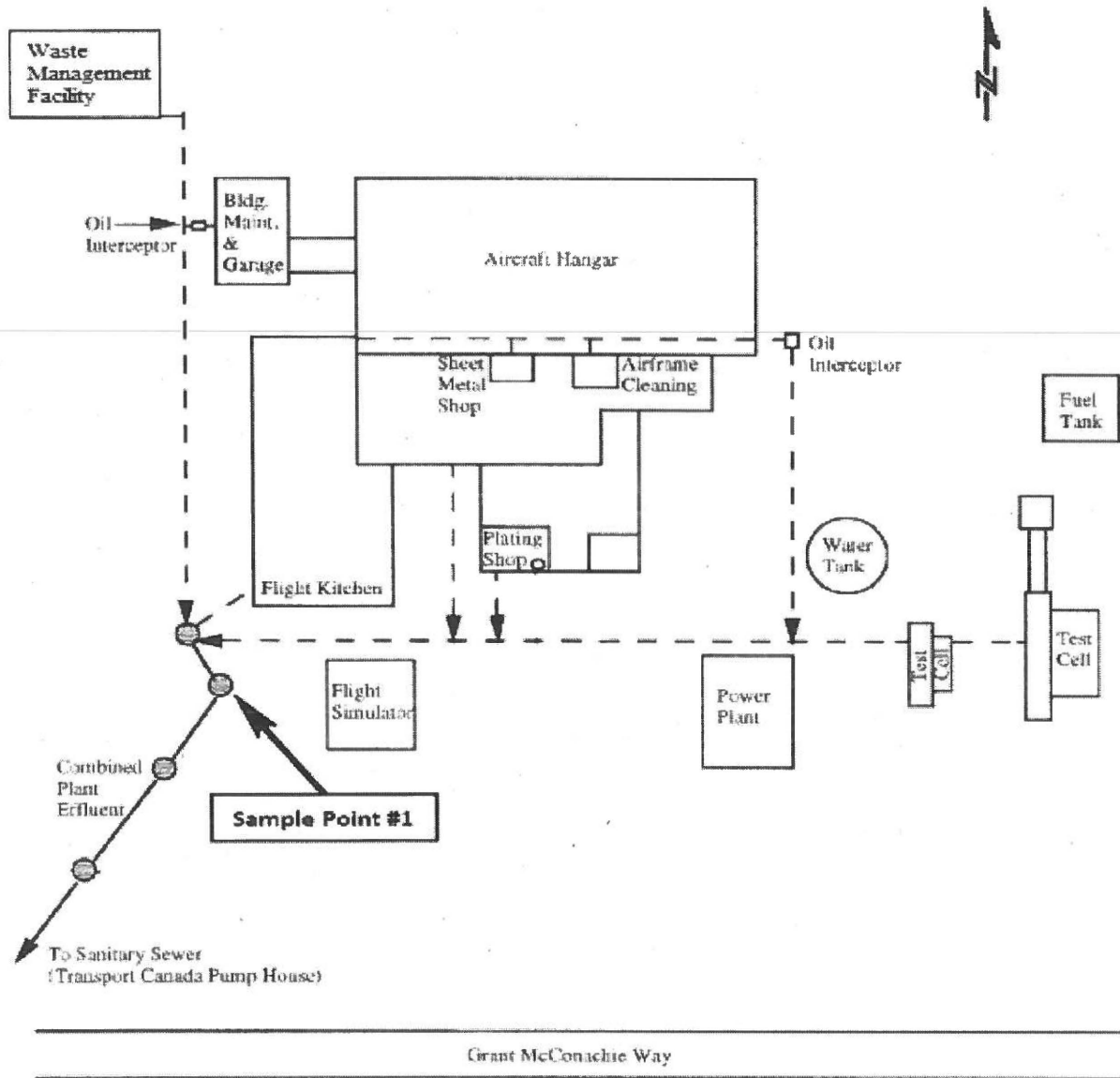
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SCHEDULE B

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 and sample handling of wastewater discharges, including sample containers, storage, preservation and hold time requirements shall be carried out in accordance with all prescribed requirements stated within the latest edition of the "British Columbia Environmental Laboratory Manual" published by the Ministry of Environment, Province of British Columbia or "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, or an alternate standard authorized by the Manager.
- b) With the exception of pH measurements, all samples shall be analyzed by an independent, ISO/IEC 17025:2005 accredited laboratory unless otherwise authorized by the Manager.

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**SCHEDULE C**

- c) Laboratories used by the Permittee must also be accredited by the Canadian Association for Laboratory Accreditation and/or the Standards Council of Canada for all parameters analyzed and must participate in relevant proficiency testing programs for each parameter.
- d) Any changes in method or location of monitoring must be authorized by the Manager.
- e) 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**

**1. FLOW MEASUREMENTS**

The Permittee shall measure or estimate the discharge flow to sanitary sewer during each month of operation using the method(s) authorized in Schedule B 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>/d) 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 grab samples and analyze for:

- pH

On one normal operating day once per quarter collect 1 set of composite samples and analyze for:

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

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**SCHEDULE D**

On one normal operating day once per quarter collect 1 set of grab samples and analyze for:

- Oil & Grease Hydrocarbon
- Total Oil & Grease

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 April 30, 2018 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. This information shall be submitted electronically using the supplied password-enabled web based application.

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.

**2. ADDITIONAL REPORTING**

Report Type	Requirements	Due Date	Frequency
Other	The Permittee must immediately submit a report to Metro Vancouver's Environmental Regulation and Enforcement Division any time that the emergency firefighting foam system is triggered and results in the discharge of firefighting foam to the sanitary sewer. The report must be submitted by phone to 604-643-8488 and by e-mail to <a href="mailto:regulationenforcement@metrovancover.org">regulationenforcement@metrovancover.org</a> .	N/A	N/A

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