



**Greater Vancouver Regional District**  
4330 Kingsway, Burnaby, British Columbia, Canada V5H 4G8

*Policy and Planning Department*  
Telephone (604) 432-6375  
Fax (604) 436-6970

# PERMIT

(Under the provisions of the GVRD Air Quality Management Bylaw No. 937, 1999)

BRITISH COLUMBIA HYDRO AND POWER AUTHORITY

IS AUTHORIZED TO DISCHARGE AIR CONTAMINANTS

FROM A PCB DECONTAMINATION FACILITY

LOCATED AT 12340 - 88TH AVENUE, SURREY BC V3W 3G2

This permit has been issued under the terms and conditions prescribed in the attached Schedules A, B, C, D, E, F, G & H for emission sources and works existing or planned on August 6, 2003

A handwritten signature in black ink, appearing to read 'J. St. John'.

DISTRICT DIRECTOR  
PERMIT NUMBER GVA0363

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Schedule B.....General Requirements

Schedule C.....Emission Monitoring, Sampling and Reporting Requirements

Schedule D.....Emission Sources and Discharge Points

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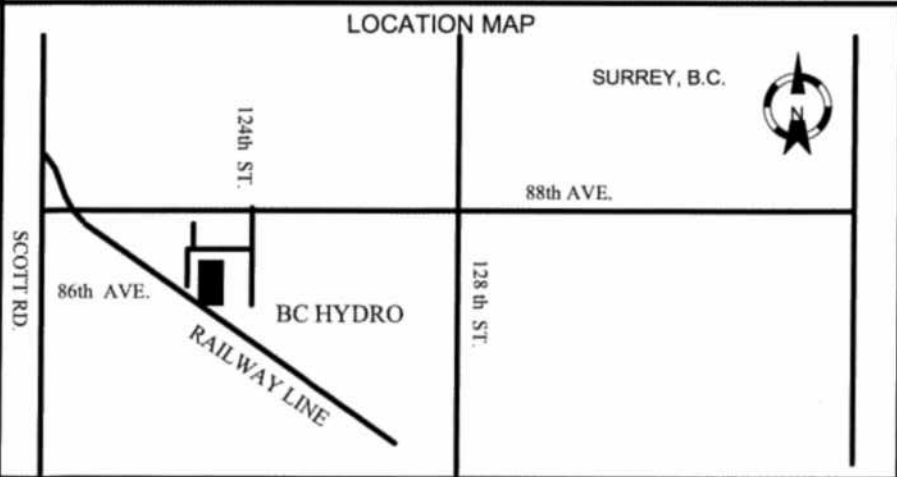
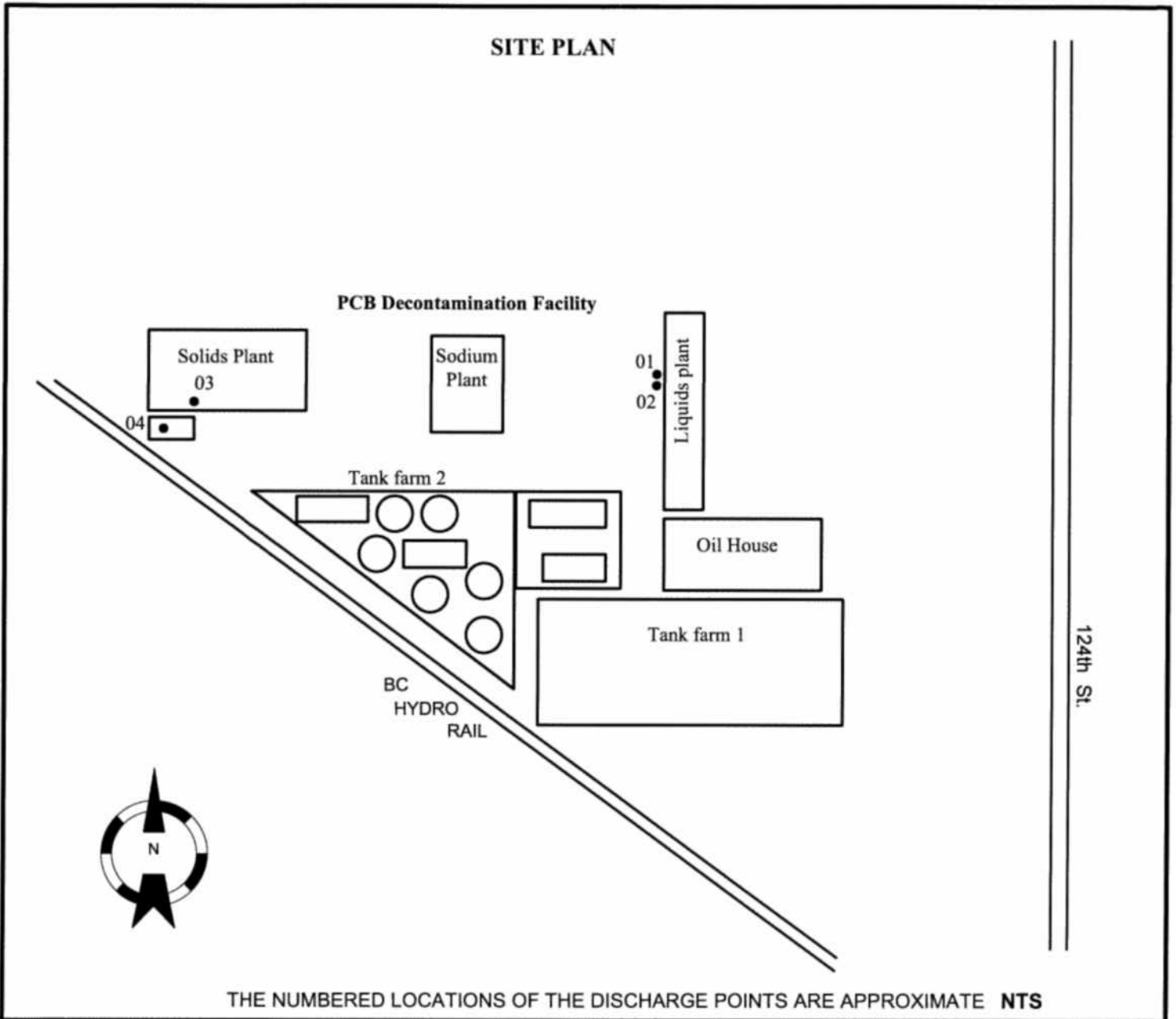
Schedule F.....Authorized Discharge Criteria

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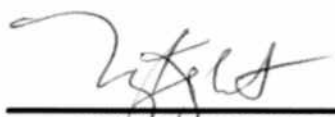
Schedule H.....Record of Permit Issuance Dates

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SCHEDULE A - PAGE 1  
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August 6, 2003

  
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Schedule A to Permit No. GVA0363

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**SCHEDULE B - Page 1  
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**A OBJECTIVES AND AMENDMENTS**

The terms and conditions of this Permit may be amended, as authorized by applicable legislation.

**B MAINTENANCE AND OPERATION OF WORKS**

Works and procedures, which this Permit authorizes to control the discharge of air contaminants, shall be employed during all operating periods of the related facilities. The Permittee shall regularly inspect and maintain all such works in good repair.

**C EMERGENCY PROCEDURES**

An emergency or other condition may prevent the continuous utilization of the above authorized works and procedures, or may result in a discharge of air contaminants which is not authorized by this Permit. If such a situation occurs, the Permittee shall report the circumstances of this event to the Greater Vancouver Regional District, Policy and Planning Department at (604) 436-6777 (24 hours), at the first available opportunity.

No discharge that has bypassed control works is authorized unless the District Director's approval has been obtained. In the event of an emergency, bypassing facilities may be used for such periods as are necessary to effect a shutdown of the related processes.

**D AIR CONDITIONING, HEATING AND VENTILATION SYSTEMS**

Air contaminants discharged from any natural gas-fired air conditioning, heating or ventilation systems for buildings located at the discharge site are not specified in this Permit. These works shall be maintained and operated in a manner prescribed by the manufacturer to ensure good combustion of the fuel with minimum discharge of air contaminants. Notwithstanding the above, the District Director may at her/his discretion stipulate limits for emission of contaminants from these sources in the Permit at a future date under provisions of the Bylaw.

**E GENERAL SITE RESTRICTIONS**

No air contaminant(s) from any single source, or combination of sources shall pass the boundary of the property, described in Section H of this Schedule B, such that the District Director determines that air pollution has occurred.



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**F INTERNAL COMBUSTION ENGINES**

Air contaminants discharged from any natural gas, propane, gasoline, diesel, or other fossil fuel fired internal combustion engines operated at the discharge site may not be specifically authorized in this Permit. These works shall be maintained and operated in a manner prescribed by the manufacturer to ensure good combustion of the fuel and to minimize emissions such that the requirements of Section E of this Schedule B are not exceeded. The District Director may at her/his discretion stipulate further limits for emission of contaminants from these sources in the Permit at a future date under provisions of the Bylaw.

**G ENGINEERING UNITS**

The engineering units specified in this Permit are in accordance with the Metric System of measure. Approximate equivalent values for the British System can be calculated using the following conversion factors.

$\text{mg/m}^3 \times 0.000437 = \text{gr/cf}$   
 $\text{m}^3/\text{min} \times 35.3 = \text{cf/min}$   
 $\text{kg/m}^3 \times 0.0624 = \text{lbs/cf}$   
 $\text{kg/L} \times 10.0 = \text{lbs/gal}$   
 $\text{mg/m}^3 \times 24.0/\text{M} = \text{ppm (by volume)}$   
 $\text{GJ/h} \times 0.9478 = \text{MMBTU/h}$

where

m<sup>3</sup> = cubic metre  
min = minute  
mg = milligram  
cf = cubic feet  
s = second  
lb = pound  
kg = kilogram  
gal = gallon  
L = litre  
M = molecular weight  
gr = grain  
ppm = parts per million  
GJ = GigaJoule  
MMBTU = Million British Thermal Unit  
h = hour

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**H STANDARD CONDITIONS AND DEFINITIONS**

Except where otherwise indicated, the following standard conditions and definitions apply to this Permit.

1. The Restrictions in the attached Schedules are maximum limits.
2. Gaseous volumes are corrected to dry conditions of 20° Celsius & 760mm Hg.
3. Particulate matter from combustion sources is corrected to 12% Carbon Dioxide.
4. Opacity is measured at the point of maximum density, nearest the discharge point.
5. Opacity measurements exclude the effect of condensed, uncombined water droplets.
6. Definitions in the Waste Management Act and GVRD Air Quality Management Bylaw No. 937, 1999 apply to terminology used in this Permit.
7. Threshold Limit Values (TLV) refer to the Time Weighted Average (TWA) exposure limits for substances specified in the American Conference of Governmental Industrial Hygienists Threshold Limit Values handbook for the years 2003.
8. Any production, storage, transportation, handling, treatment, processing or ownership of a special waste must comply with the requirements of the Waste Management Act, Special Waste Regulation.

**I DESCRIPTION OF DISCHARGE SITE**

The land from which the air contaminants are discharged is described as "Municipality of Surrey, Parcel Identifier: 008-510-202, Lot 39, Section 30, Township 2, New Westminster District, Plan 38495 and; Parcel Identifier: 008-510-229, Lot 41, Section 30, Township 2, New Westminster District, Plan 38495."

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This Schedule describes emission monitoring, sampling and reporting requirements.

The Permittee shall conduct the following monitoring and sampling program on the discharges and submit the results to the District Director. The need for increased or decreased monitoring may be reviewed periodically by the District Director.

<b>EMISSION NUMBER</b>	<b>DUE DATES</b>	<b>REQUIREMENTS</b>
01, 02, 03	October 31, 2003 and annually thereafter	The measured discharge rate and concentration of Polychlorinated Biphenyls in the emissions.
04	March 31, 2004 and annually thereafter	Written report detailing the amount of natural gas burned in the preceding calendar year.
General	March 31, 2004 and annually thereafter	Written report detailing the quantity of Polychlorinated biphenyl contaminated materials processed during the preceding calendar year.
General	March 31, 2004 and annually thereafter	Written report detailing the total number of hours and days operated during the preceding calendar year. Records are to be maintained in a written bound log or other format approved by the District Director, and made available for inspection, by Policy and Planning staff for a minimum period of three years.

Unless otherwise approved by the District Director prior to any sampling or analysis, all emission measurements shall be performed by an independent agency in accordance with those procedures described in applicable source test codes and laboratory manuals which have been published by the British Columbia Ministry of Water, Land and Air Protection, as they may be amended from time to time. Any variance from these procedures must receive prior approval from the District Director. Monitoring results shall be reported in the metric units which are used in this Permit to specify the authorized discharge criteria. These submissions shall include the production rate at the time of the test, and all field data and calculations. In addition, the Permittee shall provide the Greater Vancouver Regional District, Policy and Planning Department, with a minimum of 3 days advance notice before any emission measurements required by this Monitoring and Sampling Program are carried out.

Ambient air sampling and monitoring shall be undertaken by the Permittee, when required by the District Director.

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**SCHEDULE D - Page 1  
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The authorized emission sources and discharge points located approximately as shown on Schedule A are:

<b>EMISSION NUMBER</b>	<b>EMISSION SOURCE</b>	<b>DISCHARGE POINT</b>
01	PCB in oil decontamination vessel	Vent(s)
02	Oil degassifier	Vent(s)
03	PCB in solid's decontamination vessel	Vent(s)
04	Natural gas fired process heater	Stack(s)

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**SCHEDULE E - Page 1  
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The authorized rates of discharge for the emission sources described in Schedule D are:

<b>EMISSION NUMBER</b>	<b>MAXIMUM AUTHORIZED RATE OF DISCHARGE</b>			<b>NOTES &amp; ADDITIONAL REQUIREMENTS</b>
	FLOW m3/min	DURATION hours/day	FREQUENCY days/week	
01	0.1	24	7	Maximum of 3660 hours per annum.
02	0.03	24	7	Maximum of 3660 hours per annum.
03	0.19	24	7	Maximum of 4700 hours per annum.
04	8.7	24	7	Maximum of 4700 hours per annum.

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The authorized maximum discharge criteria for emission sources described in Schedule D are:

<b>EMISSION NUMBER</b>	<b>PARAMETER</b>	<b>RESTRICTION</b>	<b>NOTES</b>
01, 02, 03	Polychlorinated Biphenyls	0.002 mg/m <sup>3</sup>	
04	Opacity	5%	Based on six minute average.
01, 02, 03, 04	Odour	See notes	None past the plant boundary such that the District Director determines that pollution has occurred.
01, 02, 03	Chemical Contaminants	See notes	The maximum allowable emission concentration (EC) for each emitted chemical contaminant with a Threshold Limit Value (TLV) is such that the sum of the individual EC/TLV ratios for all such contaminants in any single emission is less than 10.
04	Combustion Products	See notes	Typical products of natural gas combustion at a maximum firing rate of 2.0 GJ/hr.

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The authorized works and procedures to control the discharge of air contaminants from the emission sources described in Schedule D are indicated below. The District Director may require that further works be installed, if the existing works, in her/his opinion, do not provide an acceptable level of emission control. New works or alterations to existing works must be approved, in principle, by the District Director.

Where the District Director has specified that additional works are required, the maximum discharge criteria described in Schedule F of this Permit are applicable as specified by the Completion Date(s) listed below. Prior to the specified date(s) the existing control works and procedures must be maintained in good operating condition and operated in a manner to minimize emissions.

<b>EMISSION NUMBER</b>	<b>COMPLETION DATE</b>	<b>DESCRIPTION OF WORKS/PROCEDURES</b>
01	Completed	Emission 01 - An oil bath bubbler plus two activated carbon filters in series. Only oil with a PCB concentration of less than 5,000 mg/L shall be processed.
02	Completed	Emission 02 - A coalescing filter, two activated alumina chemical traps in series plus two activated carbon filters in series. Only oil with a PCB concentration of less than 5,000 mg/L shall be processed.
03	Completed	Emission 03 - Watercooled condenser followed by two activated carbon filters in parallel and good operating practices.
04	Completed	Emission 04 - Firing the heater with natural gas using good combustion practices and operating procedures.



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**RECORD OF PERMIT ISSUANCE**

<b>DATE</b>	<b>ACTION</b>	<b>SECTIONS AFFECTED</b>
November 30, 1992	ISSUANCE	Face, Schedules A, B, C, D, E, F, G & H
June 18, 2001	AMENDMENT	Schedule E (by letter)
August 06, 2003	AMENDMENT	Face, Schedules A, B, C, D, E, F, G & H

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