



Policy & Planning Department

Telephone: 604-432-6375 Fax: 604-436-6970

PERMIT

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

PETRO-CANADA PRODUCTS

IS AUTHORIZED TO DISCHARGE AIR CONTAMINANTS

FROM A REFINED PETROLEUM PRODUCTS HANDLING FACILITY

LOCATED AT 1155 GLENAYRE DR, PORT MOODY BC V3H 1J8

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

MAY 12 2006

DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

INDEX OF SCHEDULES

Schedule A.....Site Plan

Schedule B.....General Requirements

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

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

Schedule E.....Authorized Rates of Discharge

Schedule F.....Authorized Discharge Criteria

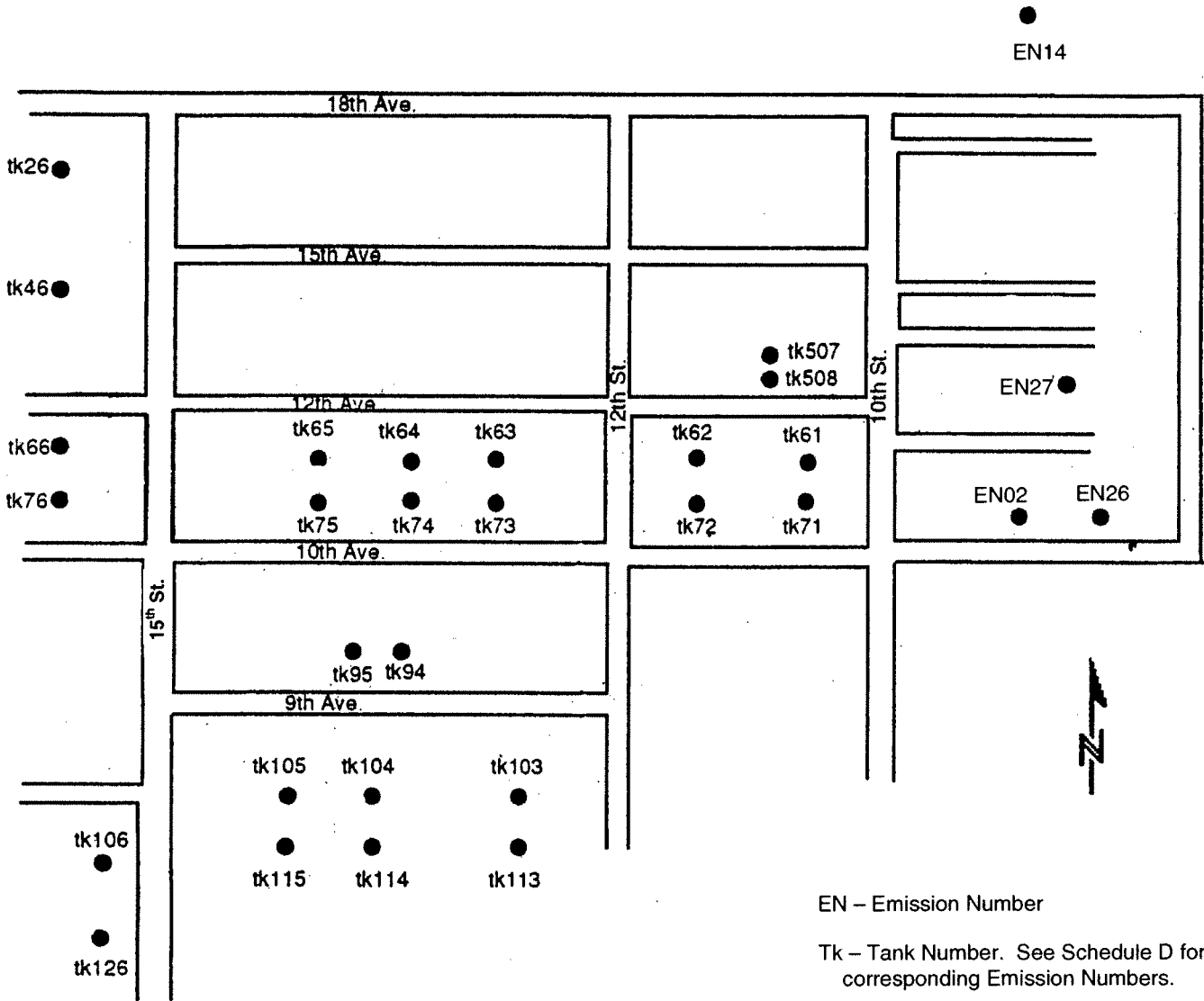
Schedule G.....Authorized Works and Procedures

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

GREATER VANCOUVER REGIONAL DISTRICT

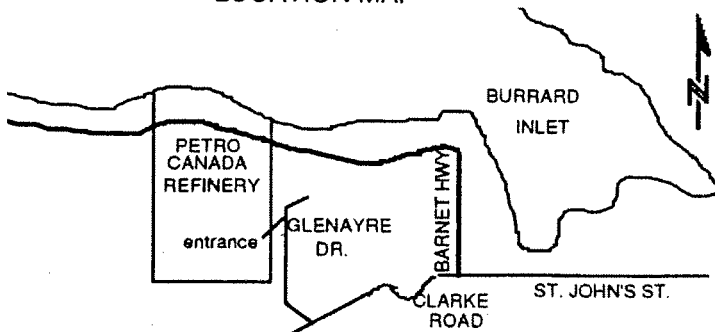
SCHEDULE A - Page 1
to PERMIT GVA0200

SITE PLAN



THE NUMBERED LOCATIONS OF THE DISCHARGE POINTS ARE APPROXIMATE N.T.S.

LOCATION MAP



MAY 12 2006

DISTRICT DIRECTOR

Schedule A to Permit No. GVA0200

**SCHEDULE B - Page 1
to PERMIT GVA0200**

A 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.

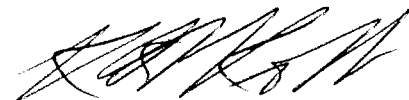
D AIR CONDITIONING, HEATING AND VENTILATION SYSTEMS

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 I of this Schedule B, such that the District Director determines that pollution has occurred.

MAY 12 2006



DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

**SCHEDULE B - Page 2
to PERMIT GVA0200**

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

$\text{m}^3 = \text{cubic metre}$
 $\text{min} = \text{minute}$
 $\text{mg} = \text{milligram}$
 $\text{cf} = \text{cubic feet}$
 $\text{s} = \text{second}$
 $\text{lb} = \text{pound}$
 $\text{kg} = \text{kilogram}$
 $\text{gal} = \text{gallon}$
 $\text{L} = \text{litre}$
 $\text{M} = \text{molecular weight}$
 $\text{gr} = \text{grain}$
 $\text{ppm} = \text{parts per million}$
 $\text{GJ} = \text{GigaJoule}$
 $\text{MMBTU} = \text{Million British Thermal Unit}$
 $\text{h} = \text{hour}$

MAY 12 2006



DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

**SCHEDULE B - Page 3
to PERMIT GVA0200**

H STANDARD CONDITIONS AND DEFINITIONS

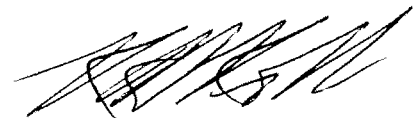
Except where otherwise indicated, the following standard conditions and definitions apply to this Permit.

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 (unless otherwise stated).
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 Environmental Management Act and GVRD Air Quality Management Bylaw current at the time of issuance of this Permit apply to terminology used in this Permit. If the Permit is subsequently amended, definitions in the Environmental Management Act and GVRD Air Quality Management Bylaw current at the time of amendment shall 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 year 2006.
8. Any production, storage, transportation, handling, treatment, processing or ownership of a hazardous waste must comply with the requirements of the Environmental Management Act Hazardous Waste Regulation (BC Reg. 63/88).
9. Meanings of words, phrases and terms contained in the Canadian Council of Ministers of the Environment (CCME) "Environmental Guidelines for Controlling Emissions of Volatile Organic Compounds from Aboveground Storage Tanks (June 1995, CCME-EPC-87E)" shall apply.

I DESCRIPTION OF DISCHARGE SITE

The land from which the air contaminants are discharged is described as "City of Port Moody Parcel Identifier: 002-156-482 Lot "S" Except: Part Dedicated Road on Plan LMP1783 District Lots 26, 103, 104 and 268 Group 1 New Westminster District Plan 22094".

MAY 12 2006



DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

**SCHEDULE C - Page 1
to PERMIT GVA0200**

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.

EMISSION NUMBER	DUE DATES	REQUIREMENTS
02, 26, 27	October 31, 2006 and every second year thereafter	FUEL COMBUSTION SOURCE TESTING The measured discharge rate and concentration of nitrogen oxides in the emission(s).
02, 26, 27	March 31, 2007 and annually thereafter	Written report detailing the types and amounts of fuel burned in the preceding calendar year.
14	March 31, 2007 and annually thereafter	VENTING AND FLARING Report due for the preceding calendar year detailing the average rate of discharge (m3/min) resulting from flare pilot operation and from flare base load operation, and also detailing the logged record of start/stop dates and times, together with the estimated discharge of contaminants (tonnes), for each incident of venting and/or flaring which results in release to the atmosphere of more than one tonne of total contaminants (particulate matter, sulphur compounds, hydrocarbons and carbon monoxide) incremental to the flare base load. In addition, each such venting and/or flaring incident shall be reported to the Greater Vancouver Regional District, Policy & Planning Department in advance if it is a planned event, or at the first available opportunity following the start of the incident if it is the result of an unscheduled or emergency event.
15, 16, 20	March 31, 2007 and annually thereafter	STORAGE TANKS Written report detailing the organic storage tank capacity, the material stored and the annual throughput for each tank for the preceding calendar years.

MAY 12 2006



DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

**SCHEDULE C - Page 2
to PERMIT GVA0200**

EMISSION NUMBER	DUE DATES	REQUIREMENTS
15, 16, 20	March 31, 2007 and annually thereafter	Written report detailing hydrocarbon losses, based on the previous calendar year, from storage tanks. Calculations shall be based on Emission Factors using the most recent version of the US EPA Storage Tank Emissions Calculations in the 'Tanks' Software or equivalent. All data inputs to the equations shall be reported including storage tank capacity, material stored and the annual throughput for each tank and loading operations.
15, 16, 20	March 31, 2007 and annually thereafter	<p>The Canadian Council of Ministers of the Environment (CCME) "Environmental Guidelines for Controlling Emissions of Volatile Organic Compounds from Aboveground Storage Tanks (June 1995, CCME-EPC-87E)" shall be adhered to for all applicable tanks unless otherwise stated in this permit. A written report of all inspections and gap measurements taken, in the previous calendar year, in accordance with the above guideline must be submitted annually.</p> <p>With respect to Appendix D.4.2 of the CCME guideline, the following alternative inspection plan is prescribed: Following a second gas reading which is still below 20% LFL but substantially above the baseline, monitoring should continue and an inspection should be conducted at the first reasonable opportunity. A specified schedule for inspections must be submitted to the District Director for approval within 10 days.</p> <p>With respect to Part 4, Section 4.3.5 in the CCME guideline: If the permittee cannot complete repairs or replacement of equipment within the specified times, alternative repair or replacement plans and a work schedule must be submitted to the District Director within 30 days of the inspection date.</p> <p>Notes: Gap measurements are not required for out of service tanks, or tanks which contain materials with a vapour pressure less than 10 kPa.</p>
General	March 31, 2007 and annually thereafter	Written report detailing the types and amounts of principal products handled in the preceding calendar year.

MAY 12 2006


 DISTRICT DIRECTOR
 PERMIT NUMBER GVA0200

**SCHEDULE C - Page 3
to PERMIT GVA0200**

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 Environment, 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 working 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.

MAY 12 2006



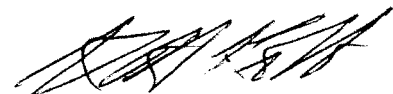
DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

**SCHEDULE D - Page 1
to PERMIT GVA0200**

The authorized emission sources and discharge points located approximately as shown on Schedule A are:

EMISSION NUMBER	EMISSION SOURCE	DISCHARGE POINT
02	Prefractionator reboiler furnace B1101	Stack(s)
14	Refinery flare	Stack(s)
15	Storage tanks (Number: 46, 61, 66, 76, 94, 95, 113)	Seal(s)
16	Storage tanks (Number: 62, 63, 64, 65, 71, 72, 73, 74, 75, 103, 104, 105, 106, 114, 115, 126)	Seal(s)
20	Storage tanks (Number: 26, 507, 508)	Seal(s)
24	Miscellaneous storage tanks	Other
26	Boiler U2003 (Nebraska Model NS-C-48 steam generator)	Stack(s)
27	Adsorber Charge Heater	Stack(s)

MAY 12 2006



DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

**SCHEDULE E - Page 1
to PERMIT GVA0200**

The authorized rates of discharge for the emission sources described in Schedule D are:

EMISSION NUMBER	MAXIMUM AUTHORIZED RATE OF DISCHARGE			NOTES & ADDITIONAL REQUIREMENTS
	FLOW m3/min	DURATION hours/day	FREQUENCY days/week	
02	288	24	7	
14	1,200	24	7	
15	See Notes	24	7	The authorized maximum rate of discharge is that resulting from vapour venting during tank filling, withdrawing and breathing.
16	See Notes	24	7	The authorized maximum rate of discharge is that resulting from vapour venting during tank filling, withdrawing and breathing.
20	See Notes	24	7	The authorized maximum rate of discharge is that resulting from vapour venting during tank filling, withdrawing and breathing.
24	See Notes	24	7	The rate of discharge is that resulting from vapour venting during tank filling, withdrawing and breathing.
26	114	24	7	
27	103	24	7	



DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

MAY 12 2006

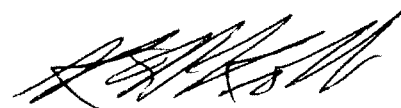
GREATER VANCOUVER REGIONAL DISTRICT

SCHEDULE F - PAGE 1
to PERMIT GVA0200

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

EMISSION NUMBER	PARAMETER	RESTRICTION	NOTES
14	Opacity	20%	Based on a six minute average. May be exceeded for a total of 6 min/h.
14, 15, 16, 20, 24	Odour	See notes	None past the plant boundary such that the District Director determines that pollution has occurred.
27	Combustion Products	See notes	Typical products of combustion of natural gas or propane at a maximum firing rate of 17.27 GJ/h.
26	Combustion Products	See notes	Typical products of natural gas or propane combustion at a maximum firing rate of 37.7 GJ/h.
02	Combustion Products	See notes	Typical products of natural gas or propane combustion at a maximum firing rate of 44.9 GJ/h.

MAY 12 2006



DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

**SCHEDULE G - Page 1
to PERMIT GVA0200**

The authorized emission control 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.

EMISSION NUMBER	COMPLETION DATE	DESCRIPTION OF CONTROL WORKS/PROCEDURES
14	Completed	A John Zink type smokeless flare equipped with three pilot flames with secure pilot gas supply, reliable pilot gas ignition system, pilot flame detection instrumentation and automatic control of flare steam injection and related appurtenances, using good combustion practices and operating procedures.
16	Completed	Existing tanks with external floating roof secondary seals in good repair, together with good operating practices. The vapour pressure of materials stored in these tanks shall not exceed 76 kPa.
15	Completed	Existing tanks with internal floating roof seals with one of: a liquid mounted seal, a mechanical-shoe seal, or a vapour-mounted seal with a rim-mounted secondary seal (as defined in the CCME "Environmental Guidelines for Controlling Emissions from Aboveground Storage Tanks) in good repair, together with good operating practices. The vapour pressure of materials stored in these tanks shall not exceed 76 kPa.
20	Completed	Existing tanks with seals, in good repair, together with good operating practices. The vapour pressure of materials stored in these tanks shall not exceed 10 kPa.
24	Completed	Fixed roof tanks Good operating practices. The vapour pressure of materials stored in these tanks shall not exceed 10 kPa.

MAY 12 2006



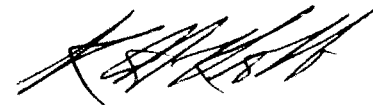
DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

SCHEDULE G - Page 2

to PERMIT GVA0200

EMISSION NUMBER	COMPLETION DATE	DESCRIPTION OF CONTROL WORKS/PROCEDURES
27	June 1, 2006	The firing of the adsorber charge heater with natural gas (propane standby), using low-NOx technology (Zeeco Model GLSF-11 or equivalent) and related appurtenances together with good combustion practices and operating procedures.
26	Completed	The firing of the furnace with natural gas (propane standby) using good combustion practices and operating procedures.
02	Completed	The firing of the furnace with natural gas (propane standby), using good combustion practices and operating procedures.

MAY 12 2006



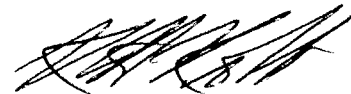
DISTRICT DIRECTOR
PERMIT NUMBER GVA0200

**SCHEDULE H - Page 1
to PERMIT GVA0200**

RECORD OF PERMIT ISSUANCE

DATE	ACTION	SECTIONS AFFECTED
MAY 12 2006	AMENDMENT	Face, Schedules A, B, C, D, E, F, G & H
December 07, 1992	ISSUANCE	Face, Schedules A, B, C, D, E, F, G & H
July 30, 1993	AMENDMENT	Face, Schedules A, B, C, D, E, F, G & H

MAY 12 2006



DISTRICT DIRECTOR
PERMIT NUMBER GVA0200