



Policy & Planning Department
Telephone: 604-432-6375 Fax: 604-436-6970

PERMIT GVA0425

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

VANCOUVER SHIPYARDS CO. LTD.

IS AUTHORIZED TO DISCHARGE AIR CONTAMINANTS

FROM A SHIPBUILDING AND REPAIR OPERATION

LOCATED AT 50 PEMBERTON AVENUE, NORTH VANCOUVER BC V7P 2R2

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

AUG 10 2006

R. H. ROBB, DISTRICT DIRECTOR

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Schedule B.....General Requirements

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

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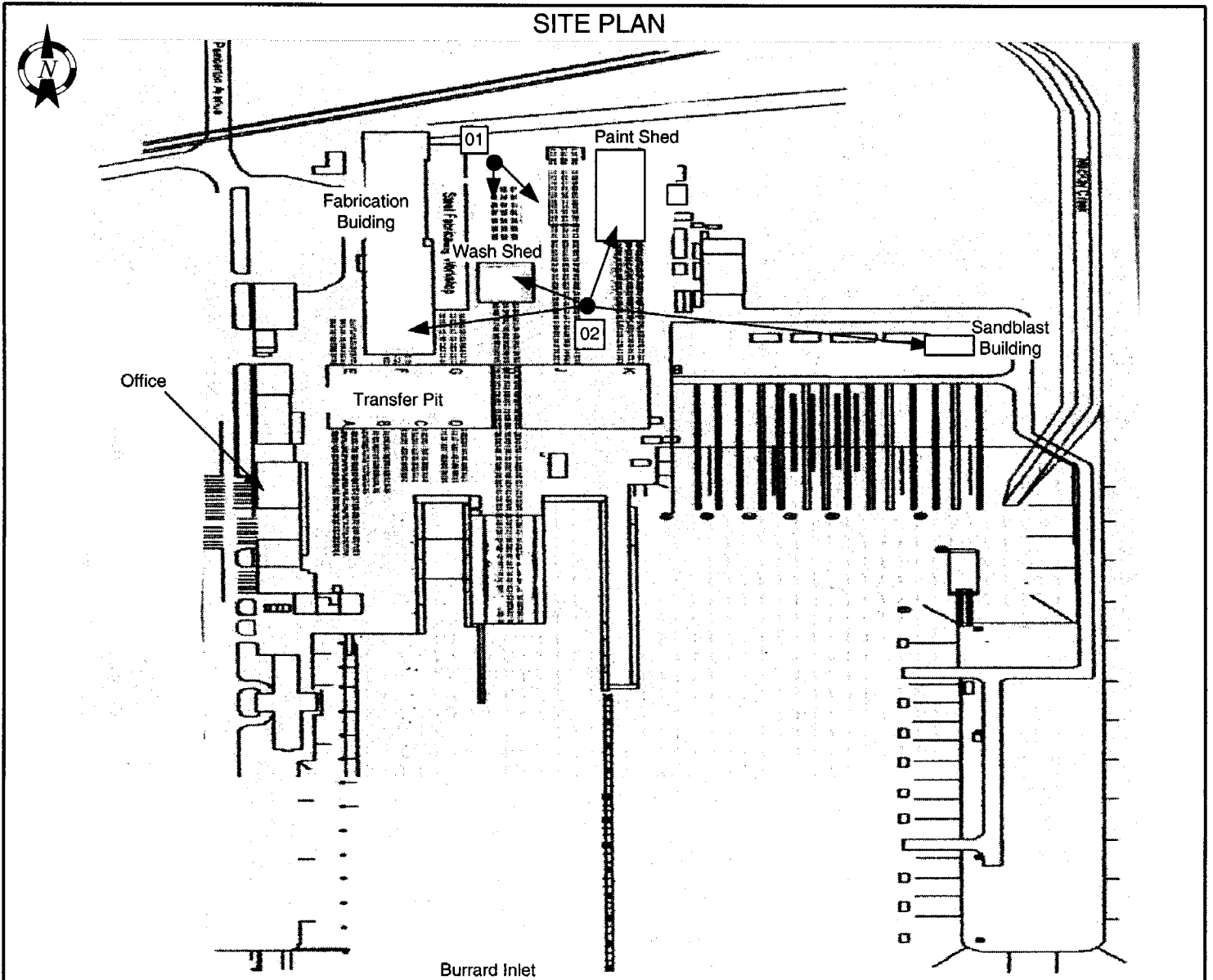
Schedule F.....Authorized Discharge Criteria

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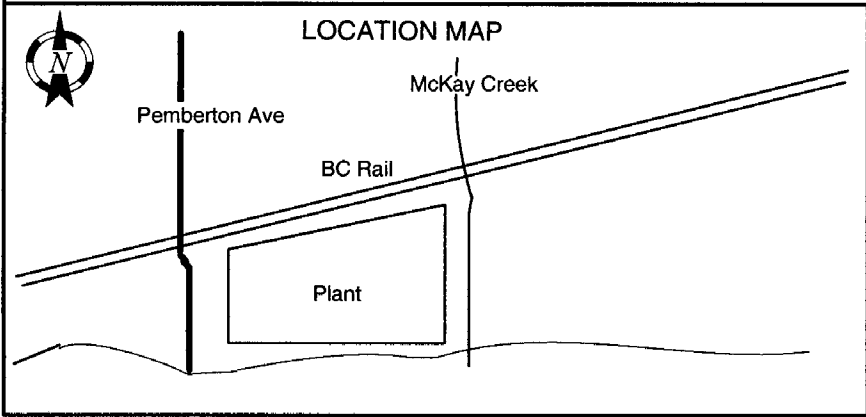
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**SCHEDULE A - Page 1
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THE NUMBERED LOCATIONS OF THE DISCHARGE POINTS ARE APPROXIMATE N.T.S.



AUG 10 2006

[Handwritten Signature]

R. H. ROBB, DISTRICT DIRECTOR

Schedule A to Permit No. GVA0425

GREATER VANCOUVER REGIONAL DISTRICT

**SCHEDULE B - Page 1
to PERMIT GVA0425**

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

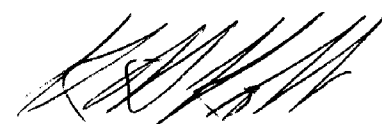
An emergency or other condition may prevent the continuous utilization of the above authorized works and procedures, or may result in a discharge of air contaminants which is not authorized by this Permit. If such a situation occurs, the Permittee shall report the circumstances of this event to the Greater 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.

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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.

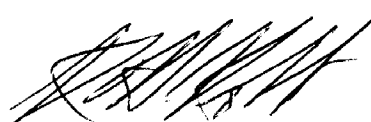
Fugitive particulate matter shall be suppressed such that dustfall at the site boundary will compare favorably to a value of 1.75 mg/dm²/day when consideration is given to:

1. The relative contribution of dustfall sources on site to measured ambient values;
2. The sensitivity of the receiving environment;
3. Other pertinent information.

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.

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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

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

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H STANDARD CONDITIONS AND DEFINITIONS

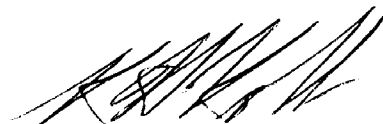
Except where otherwise indicated, the following standard conditions and definitions apply to this Permit.

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 (unless otherwise stated).
4. Opacity is measured at the point of maximum density, nearest the discharge point, based on a six-minute average.
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).

I DESCRIPTION OF DISCHARGE SITE

The land from which the air contaminants are discharged is described as "The Municipality of North Vancouver, PID: 005-520-827, Lot "D", Block 27, D.L. 266 and of the Bed of Burrard Inlet, Plan 17757."

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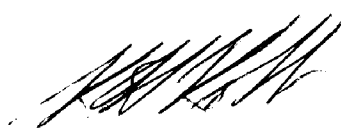
**SCHEDULE C - Page 1
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This Schedule describes emission monitoring, sampling and reporting requirements.

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.

EMISSION NUMBER	DUE DATES	REQUIREMENTS
01	See requirement	The Permittee shall continuously monitor and maintain data (10-minute discrete averages) related to the daily wind speed and direction, ambient temperature, relative humidity and dew point. This record shall be kept available for inspection by GVRD staff, for a minimum period of one year.
02	See Requirement	The Permittee shall continuously monitor the deposition of surface coating materials at the facility fence line. Data related to this monitoring shall be recorded and kept available for inspection by GVRD staff, for a minimum period of one year.
02	See requirement	The Permittee shall maintain a daily record of surface coating activities. This record shall include, as a minimum, the following information: date and time of surface coating; vessel identification; surface coating colour; volume of surface coating; surface coating identifier; application technique; and surface coating location. This record shall be kept available for inspection by GVRD staff, for a minimum period of one year.
02	March 31, 2007 and annually thereafter	Written report detailing initiatives, directives, and other changes regarding: - VOC reductions in solvent based surface coatings - surface coating material substitutions - new surface coating products investigated, and - surface coating trials. This report shall include new information regarding the feasibility and effectiveness of methods tested and control systems for reduction of VOC emissions.
General	March 31, 2007 and annually thereafter	Written report detailing the types and amounts of principal products produced and principal raw materials used in the preceding calendar year.

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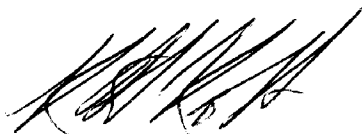
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EMISSION NUMBER	DUE DATES	REQUIREMENTS
General	March 31, 2007 and annually thereafter	Written report detailing the types, amounts and end use of organic solvents and organic solvent-containing materials used in the preceding calendar year.
General	January 31, 2007	The Permittee shall establish a training and awareness program to be provided to all employees who control or apply spay coating or sandblasting. The Permittee shall submit a copy of the program to the GVRD. A record shall be maintained of employees who have successfully completed the program and this record shall be maintained in good order and kept available on site for inspection by GVRD staff upon request.

Unless otherwise approved by the District Director prior to any sampling or analysis, emission measurements shall be performed by an appropriately qualified 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.

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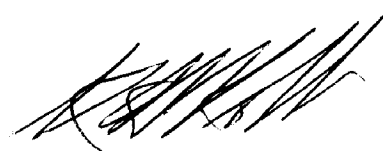
GREATER VANCOUVER REGIONAL DISTRICT

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

EMISSION NUMBER	EMISSION SOURCE	DISCHARGE POINT
01	Abrasive sandblasting operations	Various locations
02	Surface coating operations	Venting from designated enclosures

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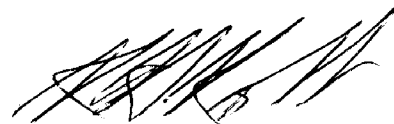
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**SCHEDULE E - Page 1
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The authorized rates of discharge for the emission sources described in Schedule D are:

EMISSION NUMBER	MAXIMUM AUTHORIZED RATE OF DISCHARGE			NOTES & ADDITIONAL REQUIREMENTS
	FLOW m3/min	DURATION hours/day	FREQUENCY days/week	
01	See Notes	24	7	The authorized maximum rate of discharge is that resulting from abrasive blasting.
02	See Notes	24	7	The authorized maximum rate of discharge is that resulting from natural ventilation of surface coating applications in the Paint Shed, Fabrication Building, Wash Shed, Sandblast Building and filter clad enclosures to spray coat vessels too large to fit in the Paint Shed.

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**SCHEDULE F - PAGE 1
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The authorized maximum discharge criteria for emission sources described in Schedule D are:

EMISSION NUMBER	PARAMETER	RESTRICTION	NOTES
01, 02	Particulate Matter	See Notes	None past the plant boundary such that the District Director determines that pollution has occurred.
01, 02	Opacity	10%	
02	Odour	See notes	None past the plant boundary such that the District Director determines that pollution has occurred.
01, 02	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.

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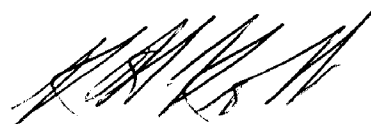
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The authorized emission control works and procedures to control the discharge of air contaminants from the emission sources described in Schedule D are indicated below. The District Director may require that further works be installed, if the existing 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
01	Completed	Good operating practices including prior instruction of all operators in proper operation of sandblasting equipment.

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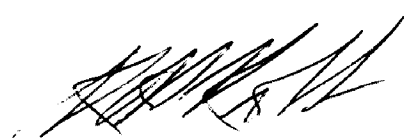
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SCHEDULE G - Page 2

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EMISSION NUMBER	COMPLETION DATE	DESCRIPTION OF CONTROL WORKS/PROCEDURES
02	Completed	<p>Spray coating activities outside the Paint Shed Fabrication Building, Wash Shed, Sandblast Building and filter clad enclosures to spray coat vessels too large to fit in the Paint Shed, is strictly prohibited. These structures are to be maintained in good repair with all entrances closed during spray coating activities. Roller or brush application techniques may be employed outside filter clad enclosed structures or Fabrication Building in accordance with good operating practices.</p> <p>The use of high-transfer efficiency spray equipment that minimizes overspray shall be used (e.g. air-assisted airless equipment) to attain the levels specified in Schedule F. Airless spray equipment may be used where low viscosity and high solid coatings preclude the use of higher-transfer efficiency spray equipment.</p> <p>Good operating practices which includes prior instruction and annual review of all operators in proper operation of surface coating application equipment and techniques which minimize the generation of surface coating overspray shall be employed. This instruction shall include, but not be limited to:</p> <ul style="list-style-type: none">- the use of recommended nozzle size;- correct application technique;- optimum spray gun distance from the surface being sprayed;- the use of optimum air-assist pressures.

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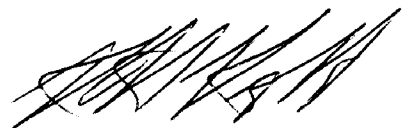
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**SCHEDULE H - Page 1
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RECORD OF PERMIT ISSUANCE

DATE	ACTION	SECTIONS AFFECTED
AUG 10 2006	AMENDMENT	Face, Schedules A, B, C, D, E, F, G, & H
November 30, 1992	ISSUANCE	Face, Schedules A, B, C, D, E, F, G, & H

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R. H. ROBB, DISTRICT DIRECTOR