

### **PERMIT**

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

HOWE SOUND PULP & PAPER GENERAL PARTNER LTD. (WESTCOAST CELLUFIBRE DIVISION)

IS AUTHORIZED TO DISCHARGE AIR CONTAMINANTS

FROM A LOG CHIPPING PLANT

LOCATED AT 8501 ONTARIO STREET, VANCOUVER BC V5X 4W2

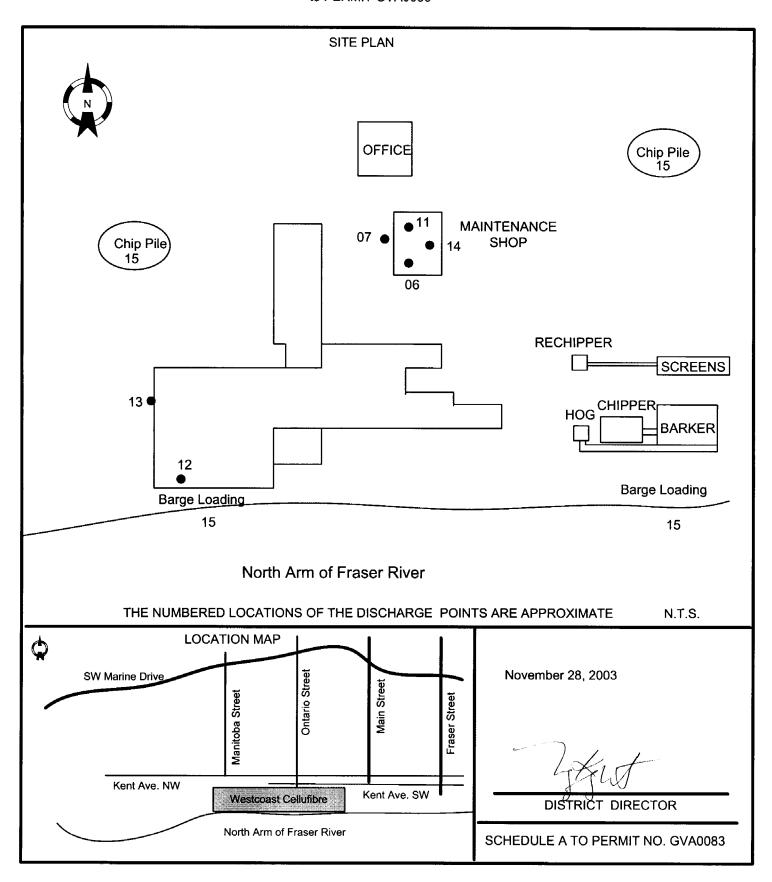
This permit has been issued under the terms and conditions prescribed in the attached Schedules A, B, C, D, E, F, G & H for emission sources and works existing or planned on November 28, 2003

DISTRICT DIRECTOR
PERMIT NUMBER GVA0083

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## SCHEDULE A - PAGE 1 to PERMIT GVA0083



## SCHEDULE B - Page 1 to PERMIT GVA0083

#### 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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## SCHEDULE B - Page 2 to PERMIT GVA0083

### **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.

#### 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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## SCHEDULE B - Page 3 to PERMIT GVA0083

### **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.

```
mg/m3 \times 0.000437 = gr/cf

m3/min \times 35.3 = cf/min

kg/m3 \times 0.0624 = lbs/cf

kg/L \times 10.0 = lbs/gal

mg/m3 \times 24.0/M = ppm (by volume)

GJ/h \times 0.9478 = MMBTU/h
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### where

```
m3 = 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 current at the time the facility commences operation 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 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: "(1) City of Vancouver, Parcel Identifier 008-077-720, Lot 2, BLock 12, District Lot 311, Plan 6834. (2) City of Vancouver, Parcel Identifier 008-078-009, Block 22, South West Part of District Lot 322, Plan 1942. (3) City of Vancouver, Parcel Identifier 008-044-759, that part of Block 11 (Reference Plan 54) lying south of the Vancouver and Lulu Island Railway, except part in Explanatory Plan 12383, District Lot 322. (4) City of Vancouver, Parcel Identifier 008-044-431, Lot B (Reference Plan 146) except the North 33 feet, now road, Block 12, District Lot 322. (5) City of Vancouver, Parcel Identifier 008-077-789, Lot A, except the North 33 feet now road, Block 13, District Lot 322, Plan 5270. "

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# SCHEDULE C - Page 1 to PERMIT GVA0083

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
General	March 31, 2004 and annually thereafter	Written report detailing the types and amounts of principal products produced and principal raw materials used in the preceding calendar year.
General	March 31, 2004 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.

Emission testing and 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 to PERMIT GVA0083

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

EMISSION NUMBER	EMISSION SOURCE	DISCHARGE POINT
06	Bench grinder and babbitt pot	Stack(s)
07	Babbitt pot	Stack(s)
11	Welding station in the maintenance shop	Stack(s)
12	Welding station in the millwright shop	Stack(s)
13	Welding station in the sawmill	Vent(s)
14	Three welding stations in maintenance shop	Stack(s)
15	Stockpiling, storage, reclaiming and barge loading of wood residues.	Various

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# SCHEDULE E - Page 1 to PERMIT GVA0083

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	
06	35	16	5	
07	20	16	5	
11	30	24	5	
12	30	24	5	
13	15	24	5	
14	50	24	5	
15	See Notes	24	5	The authorized rate of discharge is that resulting from the stockpiling, reclaiming and barge loading operations.

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# SCHEDULE F - PAGE 1 to PERMIT GVA0083

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

EMISSION NUMBER	PARAMETER	RESTRICTION	NOTES
15	Particulate Matter	See Notes	None from any single source, or combination of sources, past the plant boundary such that the District Director determines that pollution has occurred.
06, 11, 12, 13, 14	Particulate Matter	50 mg/m3	
06, 07, 11, 12, 13, 14	Opacity	10%	
15	Opacity	20%	
06, 07	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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# SCHEDULE G - Page 1 to PERMIT GVA0083

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.

E	M	IS	SS	I	0	ı
N	U	M	В	E	R	

COMPLETION DATE

DESCRIPTION OF WORKS/PROCEDURES

06, 07, 11, 12,

Completed

Good operating practices.

13, 14, 15

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# SCHEDULE H - Page 1 to PERMIT GVA0083

### **RECORD OF PERMIT ISSUANCE**

DATE	ACTION	SECTIONS AFFECTED
November 30, 1992	ISSUANCE	Face, Schedules A, B, C, D, E, F, G & H
September 03, 1993	AMENDMENT	Face, Schedules A, B, C, D, E, F, G & H
November 28, 2003	<b>AMENDMENT</b>	Face, Schedules A, B, C, D, E, F, G & H

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