



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

Policy and Planning Department
Telephone (604) 432-6375
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PERMIT

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

WINVAN PAVING LTD.

IS AUTHORIZED TO DISCHARGE AIR CONTAMINANTS

FROM AN ASPHALT PLANT

LOCATED AT 220 EDWORTHY WAY, NEW WESTMINSTER BC V3L 5G5

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 May 28, 2004

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DISTRICT DIRECTOR
PERMIT NUMBER GVA0078

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

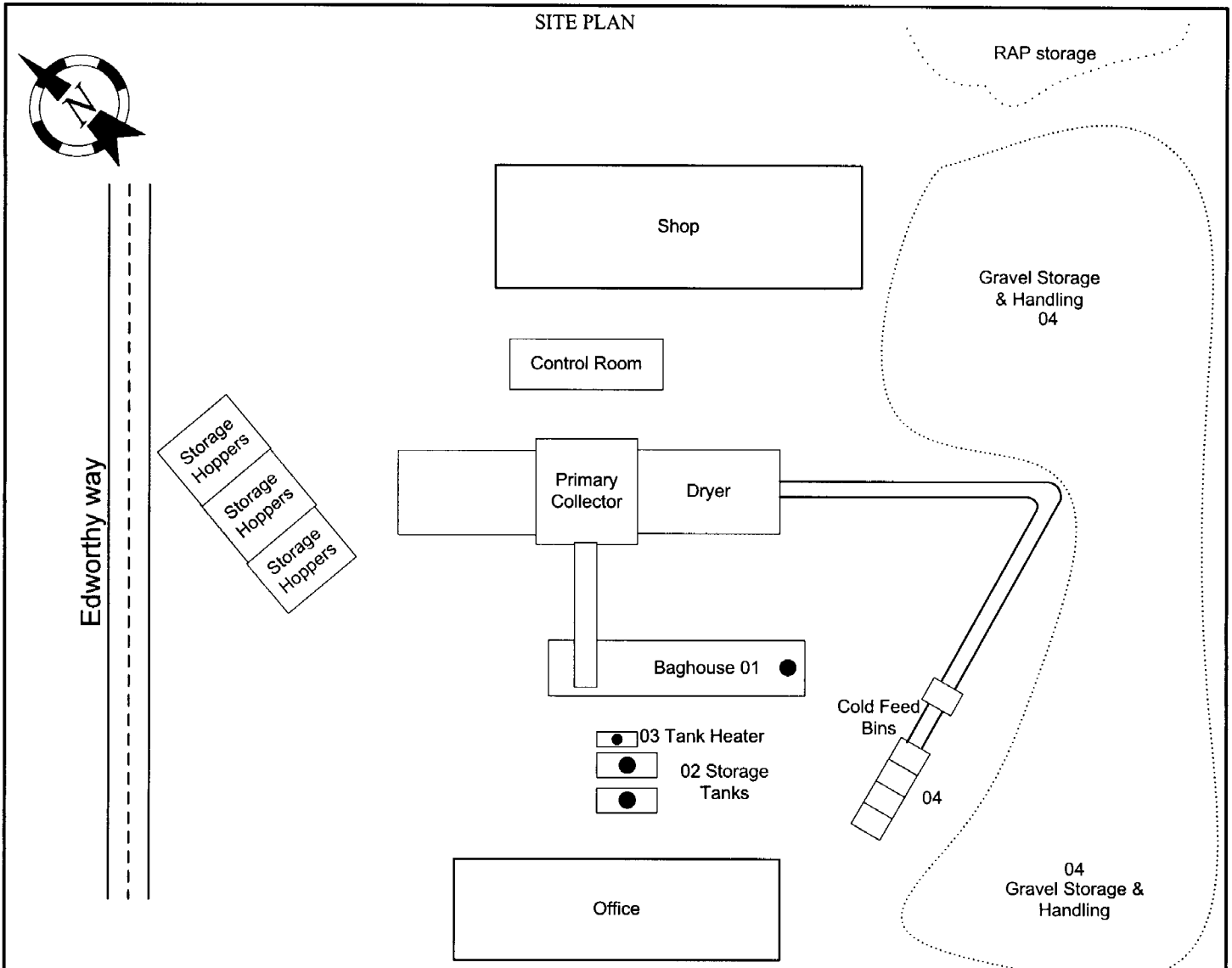
Schedule E.....Authorized Rates of Discharge

Schedule F.....Authorized Discharge Criteria

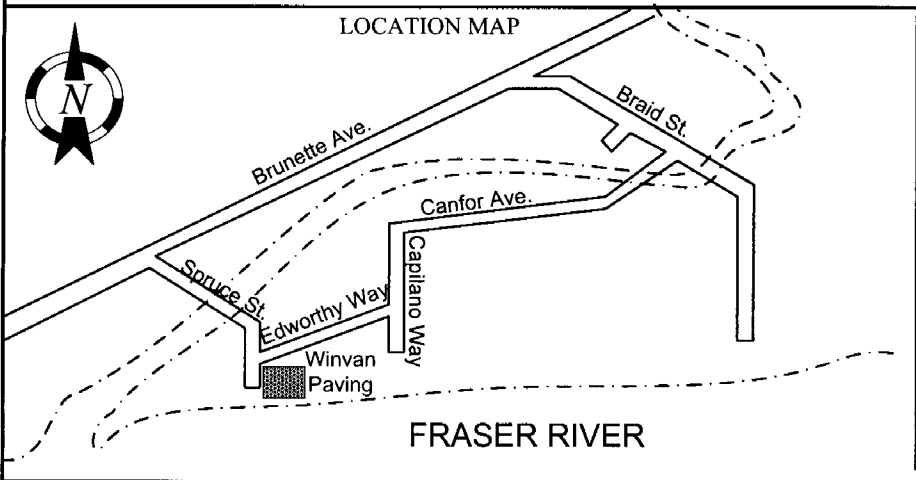
Schedule G.....Authorized Works and Procedures

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SCHEDULE A - PAGE 1
to PERMIT GVA0078



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



May 28, 2004

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Schedule A to Permit No. GVA0078

GREATER VANCOUVER REGIONAL DISTRICT

SCHEDULE B - Page 1 to PERMIT GVA0078

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
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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.

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 standard conditions of 20°C Celsius & 760mm Mercury.
3. Particulate matter, organics and carbon monoxide concentrations for the Asphalt plant (Emission 01) are corrected to 16% oxygen. Particulate matter from all other 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 "City of New Westminster PID: 005-093-481 Lot 25 of Suburban Block 8 Plan 53357."

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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	August 31, 2004, and annually thereafter	Written report detailing the measured discharge rate and emission concentrations (mg/m ³) for particulate matter, organics (one-hour average, "organics" means total gaseous organic vapours consisting primarily of alkanes, alkenes or arenes {aromatic hydrocarbons} or any combination of them) and carbon monoxide. The following additional information must be collected: (a) Amount of recycled asphalt pavement (RAP) used as a percentage of total hot mix asphalt production; (b) Temperature of the final hot mix asphalt product leaving the plant. Stack monitoring must be performed when the plant is operating at 80% or more of the authorized maximum plant production rate and maximum percentage of recycled asphalt pavement as determined by procedures in Schedule G. Repeated monitoring conducted as a result of exceedances of the maximum authorized production rate, as required in schedule G, must be completed within 30 days and the results must be submitted to the District Director within 30 days of the repeated test.
01	March 31, 2005 and annually thereafter	Written report indicating inspection frequency, bag condition and action taken or proposed to solve any problems detected for the baghouses described in Schedule G of this Permit.
01, 03	March 31, 2005 and annually thereafter	Written report detailing the types and amounts of fuel burned in the preceding calendar year.


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**SCHEDULE C - Page 2
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EMISSION NUMBER	DUE DATES	REQUIREMENTS
02	March 31, 2005 and annually thereafter	Written report detailing the organic storage tank capacity, the material stored and the annual throughput for each tank for the preceding calendar year.
General	March 31, 2005 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, 2005 and annually thereafter	Written report detailing the total number of hours and days operated within the GVRD 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 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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**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	Asphalt pavement plant	Baghouse Exhaust(s)
02	Asphalt storage tanks	Vent(s)
03	Process heater	Stack(s)
04	Aggregate and RAP feed bins and aggregate storage piles	Feeders and aggregate storage area

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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	1,400	16	6	Not to exceed 175 hours per year of standby fuel utilization. The number of hours per year may be exceeded only if supply constraints occur beyond the control of the facility operator and supporting documentation is submitted to the District Director.
02	See Notes	24	7	The rate of discharge is that resulting from vapour venting during tank filling and breathing.
03	13	24	7	
04	See Notes	24	7	The authorized rate of discharge is that resulting from the transfer and reclaiming operations as well as stockpile wind erosion effects.

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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	Carbon Monoxide	200 mg/m3	
01	Organics	60 mg/m3	Based on a one-hour average.
01	Particulate Matter	90 mg/m3	
01	Opacity	10%	Based on a six minute average. May be exceeded for a total of six minutes per hour up to a maximum of 20%.
04	Opacity	20%	Based on six minute average.
01, 02	Odour	See notes	None past the plant boundary such that the District Director determines that pollution has occurred.
03	Combustion Products	See notes	Typical products of combustion of natural gas at a maximum firing rate of 2.22 GJ/hr.
01	Combustion Products	See notes	Typical products of combustion of natural gas or standby fuel oil at a maximum firing rate of 102.12 GJ/hr.
04	Particulate Matter	See notes	None past the plant boundary such that the District Director determines that pollution has occurred.

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**SCHEDULE G - Page 1
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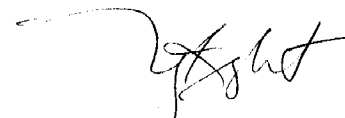
The authorized works and procedures to control the discharge of air contaminants from the emission sources described in Schedule D are indicated below. The District Director may require that further works be installed, if the existing works, in her/his opinion, do not provide an acceptable level of emission 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.

EMISSION NUMBER	COMPLETION DATE	DESCRIPTION OF WORKS/PROCEDURES
01	Completed	EN01: Baghouse and related appurtenances together with the maintenance of the conveying, ducting and handling system as required such that all contaminants are conveyed under partial vacuum to the control equipment. The asphalt drum shall be fired with natural gas or standby low sulphur fuel oil (maximum 0.05% sulphur content by weight) using good combustion practices and operating procedures.

The maximum authorized production rate for the works shall be determined from the production rate during the most recent valid in-compliance stack test. The rate during the test will establish a rate equivalent to 80% of the maximum authorized production rate. The maximum authorized percentage of recycled asphalt pavement utilized shall be equivalent to the rate used during the most recent valid in-compliance stack test.

The authorized production rate and percentage of recycled asphalt pavement added may be exceeded for the purposes of compliance testing and/or for the purposes of establishing a new authorized rate, pursuant to the terms and conditions above and in Schedule C of this permit. If the maximum plant production rate or maximum percentage of recycled asphalt mix is exceeded during periods when stack monitoring is not being performed, stack monitoring must be repeated as per the requirements in Schedule C.



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**SCHEDULE G - Page 2
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EMISSION NUMBER	COMPLETION DATE	DESCRIPTION OF WORKS/PROCEDURES
02	Completed	EN02: Tank vents. Good operating practices.
03	Completed	EN03: The firing of the tank heater with natural gas, using good combustion practices and operating procedures.
04	Completed	EN04: Feeders and aggregate storage area. Good operating practices.

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**SCHEDULE H - Page 1
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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
May 28, 2004	AMENDMENT	Face, Schedules A, B, C, D, E, F, G & H

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