



Date: FEB 19 2004

File: PR-13845

REGISTERED MAIL

HSPG GENERAL PARTNER LTD.
1500 - 550 Burrard Street
Bentall 5
Vancouver, BC V6C 2C1

Dear Permittee:

Enclosed is amended Permit PR-13845 under the provisions of the *Waste Management Act*. Your attention is respectfully directed to the conditions of the permit. An annual fee for the permit will be determined in accordance with the Waste Management Permit Fees Regulation.

This permit does not authorize entry upon, crossing over, or use for any purpose of private or crown lands or works, unless and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority rests with the permittee. It is also the responsibility of the permittee to ensure that all activities conducted under this permit are carried out with due regard to the rights of third parties, and comply with other applicable legislation that may be in force.

This decision may be appealed by persons aggrieved by the decision in accordance with Part 7 of the *Waste Management Act*. Notice of the appeal must (1) be in writing, (2) include the grounds for appeal, (3) be directed by registered mail or personally delivered to the Chair, Environmental Appeal Board, Fourth Floor, 747 Fort Street, Victoria, British Columbia, V8W 3E9, (4) be delivered within 30 days from the date notice of the decision is given, and (5) be accompanied by a fee of \$25.00, payable to the Minister of Finance.

Administration of this permit will be carried out by staff from our regional office located at 10470 - 152nd Street, Surrey, British Columbia, V3R 0Y3. Plans, data and reports pertinent to the permit are to be submitted to the Regional Waste Manager at this address.

Yours truly,

R.H. Robb
Assistant Regional Waste Manager

Enclosure

c.c. Environment Canada
Al Strang, HSPG General Partner Lt.d., Port Mellon, BC V0N 2S0

MINISTRY OF WATER, LAND
AND AIR PROTECTION

PERMIT
PA-13845

Under the Provisions of the Waste Management Act

HSPG GENERAL PARTNER LTD.
1500 - 550 Burrard Street
Bentall 5
Vancouver, British Columbia
V6C 2C1

is authorized to discharge refuse to the land from a pulp and paper mill located at Port Mellon, British Columbia, subject to the conditions listed below. Contravention of any of these conditions is a violation of the *Waste Management Act* and may result in prosecution

This permit supersedes and amends all previous versions of Permit PA-13845 issued under Part 2, Section 10 of the *Waste Management Act*.

1. **AUTHORIZED DISCHARGES**

1.1. This section applies to the discharge of refuse from **A PULP AND PAPER MILL**. The site reference number for this discharge is E223050.

1.1.1 The maximum authorized rate of discharge is 91 250 cubic metres per year (uncompacted volume)

1.1.2 The components of the refuse which may be discharged are approximately:


Wood residue boiler fly ash	64% by volume
Sludges	13% by volume
Wood residue boiler grate ash	9% by volume
Waste lime mud and green liquor dregs	9% by volume
Waste brown fibre	3% by volume
Miscellaneous mill waste	2% by volume

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- 1.1.3 The authorized works are a landfill operation in a seventeen (17) hectare site that shall be developed in three (3) phases, each of which consists of one (1) cell, not exceeding six (6) hectares. Only one (1) active cell shall be in operation at any time to receive refuse deposit. The cell shall be bermed, lined with a composite liner comprising a 1.5 mm thick high density polyethylene liner and a nominal 500 mm thick layer of a soil-bentonite mix or equivalent, leachate collection system, leak detection and collection system, leachate conveyance system, leachate treatment system, surface water diversion works, and related appurtenances approximately located as shown on Site Plan A. Plans and specifications of the authorized works are as described in AGRA Earth & Environmental Limited report number VE50448.400, dated August 1995, titled "Proposed Landfill Site Port Mellon, B.C. Geotechnical and Hydrogeological Feasibility Study Report" and report number VE50448, dated September 12, 1996, titled "Port Mellon Proposed Landfill System, Final Report", or alternatives which give equivalent or better environmental protection.
- 1.1.4 The permittee shall install and complete the authorized pollution prevention and abatement works prior to commencement of discharge in each phase of landfill operation.
- 1.1.5 The legal description for the location of the facilities from which the discharge originates is Block 3, Plan 21182 of Lot 1364, Lot 6103, Lot 6986, Block 2 of Lot 1364, Lot 6986, Plan 11981, and Lot 1366, all of Group One, New Westminster District.
- 1.1.6 The legal description for the location of the point of discharge is District Lots 1366 and 1367, New Westminster District.

2. GENERAL REQUIREMENTS

2.1. Completion Schedule

The landfill operation authorized in Section 1.1 shall be developed in accordance with the following schedule:

	Works	Completion Date
Phase I:	Infrastructure and Cell #1 (a)	4 th quarter 1998
	Cell #1 (b)	4 th quarter 1999
Phase II:	Additional infrastructure and Cell #2	Year 2002 to 2004*
Phase III:	Additional infrastructure and Cell #3	Year 2006 to 2011*

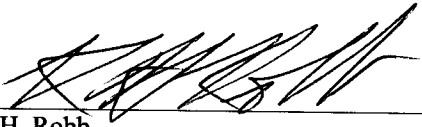
* Or later, depending upon the success of waste reduction and re-use programs.

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2.2. **Maintenance of Works**

The permittee shall inspect the authorized works regularly and maintain them in good working order. Notify the Regional Waste manager of any malfunction of these works.

2.3. **Emergency Procedures**

In the event of an emergency which prevents compliance with a requirement of this permit, that requirement shall be suspended for such time as the emergency continues or until otherwise directed by the Regional Waste Manager provided that:

(a) Due diligence was exercised in relation to the process, operation or event which caused the emergency and that the emergency occurred notwithstanding this exercise of due diligence;

(b) The manager is immediately notified of the emergency; and

(c) It can be demonstrated that every thing possible is being done to restore compliance in the shortest possible time.

Notwithstanding (a), (b) and (c) above, the manager may require the operation to be suspended or production levels to be reduced to protect the environment while the situation is corrected.

2.4. **Bypasses**

The discharge of leachate which has bypassed the authorized treatment works is prohibited unless the approval of the Regional Waste Manager is obtained and confirmed in writing.

2.5. **Process Modifications**

The Regional Waste Manager shall be notified prior to implementing changes to any process that may adversely affect the quality and/or quantity of the discharge.

2.6. **Site Preparation and Restoration**

Provision of fencing, site access, vehicle safety barriers, surface water diversionary works, firebreaks and site restoration as required, shall be carried out to the satisfaction of the Regional Waste Manager.

2.7. **Buffer Zones**

The Permittee shall maintain a buffer zone, at least 40 metres wide, between the site and the channel of the Rainy River. No refuse shall be discharged within the buffer zone.

2.8. **Landfill Operation**

The permittee shall maintain the landfill authorized in Section 1 as a Level B operation in accordance with the *Pollution Control Objectives for the Forest Products Industry of British Columbia*, dated November 23, 1977, , which requires that suitable cover material shall be applied on all exposed solid waste once every 20 operating days and at least once per month. Wood residue boiler fly ash and grate ash are considered to constitute suitable cover for the other wastes disposed in the landfill. The Regional Waste Manager may vary the frequency of covering when freezing conditions adversely affect normal operation.

No wood waste contaminated with wood preserving chemicals or wastes that contain chemicals that can penetrate the high density polyethylene liner shall be incorporated into the landfill.

Waste asbestos may be discharged to the landfill authorized in Section 1 and shall be managed in accordance with the *Special Waste Regulation*.

2.9. **Fugitive Particulate Emission**

Fugitive particulate emissions created within the operation area shall be suppressed. Measured ambient air quality will be compared to the Ministry Objective values of 1.75 milligrams per square decimetre per day (mg/dm²/d) of total particulate dustfall and 50 micrograms per cubic metre (ug/m³) on a 24-hour average basis of PM10 (particulate matter of effective diameter less than 10 microns). If the measured ambient air quality exceeds the Objective values, the sensitivity of the receiving environment, the contribution of the particulate sources to the measured ambient values, plus any other pertinent information, will be evaluated. The Regional Waste Manager may amend the permit to require additional monitoring or control measures for fugitive particulate sources.


2.10. **Miscellaneous Mill Waste**

The miscellaneous mill waste authorized for discharge in Section 1.1.2 shall include asphalt, concrete, bricks and the like from minor construction/demolition projects and/or road repair; road sweepings; shop floor sweepings; empty barrels; and used rope. The discharge of any miscellaneous mill waste other than the types specified above must be approved by the Regional Waste Manager..

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2.11. **Reduce, Recycle and Reuse**

The Ministry of Water, Land and Air Protection supports the sequential hierarchy of solid waste management, namely reduce, reuse and recycle. Accordingly the Permittee is encouraged to segregate for recycling and reuse, where possible, materials destined for disposal at this site.

2.12. **Maintenance of Contiguous Point – District Lots 1366 and 1367**

The permittee shall ensure that District Lot 1366, New Westminster District remains contiguous with District Lot 1367, New Westminster District. The permittee shall notify the Regional Waste Manager in writing at least 90 days prior to any subdivision of District Lot 1366 and/or District Lot 1367, New Westminster District.

2.13. **Operating Plan**

The Permittee shall operate the landfill, authorized in Section 1.1, in accordance with an operating plan, prepared by a qualified professional, licensed to practice in the province of British Columbia.

The Permittee shall review the operating plan on an annual basis to determine if changes are required. Any revisions to the plan shall be submitted to the Regional Waste Manager as part of the annual report required in Section 3.4.

2.14. **Closure Plan**

The Permittee shall maintain an up to date site closure plan. The closure plan may include, but is not limited to, details of the final landfill profiles and grades, final cover material specifications, perimeter and surface drainage provisions, proposed end use of the closed site and other closure requirements, as may be specified by the Regional Waste Manager.

3. **MONITORING AND REPORTING REQUIREMENTS**

3.1. **Discharge Monitoring**


3.1.1 **Monitoring**

The permittee shall obtain a grab sample of the leachate collected in the lined landfill cell and have the sample analyzed for the following parameters:

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<u>Parameter</u>	<u>Frequency</u>
pH	Semi-annually
Specific Conductivity	Semi-annually
Biochemical oxygen demand	Semi-annually
Dioxins and furans	Annually

The leakage detection/collection system shall be monitored semi-annually for the presence of flow. Should any groundwater be collected by the leakage detection/collection system, the collected groundwater shall also be analyzed for the same parameters and on the same frequency as listed above.

Based on the sampling results, the monitoring requirements may be extended or altered by the Regional Waste Manager

3.1.2 **Discharge Quantities**

The permittee shall record the types and volumes (uncompacted cubic metres) of refuse discharge to the landfill (not including natural soil used as intermediate cover). These records shall be maintained on site for inspection and shall be submitted to the Regional Waste Manager as required by Environmental Protection staff.

3.2. **Receiving Environment Monitoring**

3.2.1 **Groundwater Monitoring**

The permittee shall maintain the six (6) groundwater monitoring wells, approximately located as shown in attached Site Plan A, for Phase I operation. These wells shall be sampled and tested semi-annually for pH, Specific Conductivity, Biochemical Oxygen Demand and Metals and annually for PAHs, Dioxins and Furans. Based on the sampling results, the monitoring requirements may be extended or altered by the Regional Waste Manager.

3.3. **Monitoring Procedures**

3.3.1 **Sampling Procedures**

Sampling is to be carried out in accordance with the procedures described in the latest version of the "British Columbia Field Sampling Manual for Continuous Monitoring Plus the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples, 2003 Edition (Permittee)", or most recent edition, or by suitable alternative procedures as authorized by the Regional Waste Manager.

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A copy of the above manual may be purchased from the Queen's Printer Publications Centre, P. O. Box 9452, Stn. Prov. Gov't. Victoria, British Columbia, V8W 9V7 (1-800-663-6105 or (250) 387-6409). A copy of the manual is also available for inspection at all Environmental Protection offices.

3.3.2 Chemical Analysis

Analyses re to be carried out in accordance with procedures described in the "British Columbia Laboratory Methods Manual for the Analysis of Water, Wastewater, Sediment, Biological Materials and Discrete Ambient Air Samples (2003 Permittee Edition)", or the most recent edition, or by suitable alternative procedures as authorized by the Regional Waste Manager.

A copy of the above manual may be purchased from the Queen's Printer Publications Centre, P. O. Box 9452, Stn. Prov. Gov't. Victoria, British Columbia, V8W 9V7 (1-800-663-6105 or (250) 387-6409), and are also available for inspection at all Environmental Protection offices.

3.4. Reporting

An annual report shall be prepared by the permittee and submitted to the Regional Waste Manager. The report shall include, but is not limited to the following items:

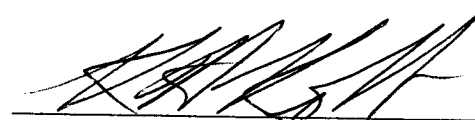
- i) types and volumes (uncompacted cubic metres) of refuse discharged as required by Section 3.1.2,
- ii) monitoring data as required by Sections 3.1.1 and 3.2.1 and analysis of the data,
- iii) remaining capacity of landfill (uncompacted cubic metres),
- iv) changes to the operational plan as necessary
- v) review of closure plan.

The report for each calendar year shall be submitted by March 31 of the following year.

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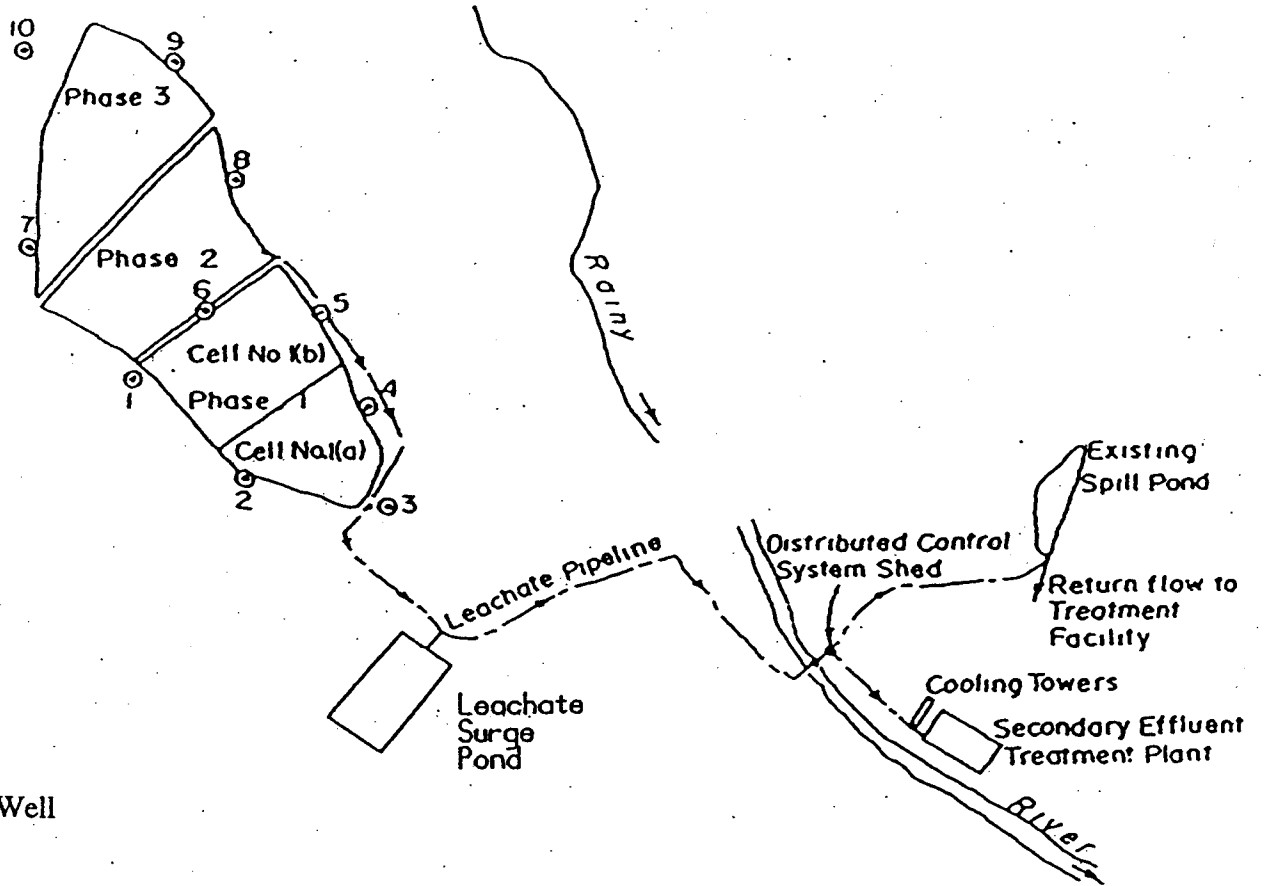
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SITE PLAN A



Legend

⊙ Monitoring Well

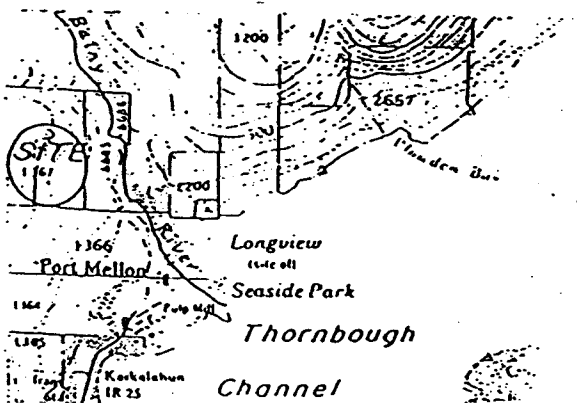
Legal Description: District Lots 1364, 1366 and 1367, Group 1, New Westminster District

Location Map

Scale: 1:10,000

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Lower Mainland Region