

MINISTRY OF WATER, LAND AND AIR PROTECTION

Vancouver Island Region Environmental Protection 2080-A Labieux Road Nanaimo, British Columbia V9T 6J9 Telephone: (250) 751-3100

Telephone: (250) 751-Fax: (250) 751-3103

PERMIT PR-07399

Under the Provisions of the Waste Management Act

Norske Skog Canada Limited and
Norske Skog Canada Pulp Operations Limited
doing business as NorskeCanada, general partnership
16th Floor, 250 Howe Street
Vancouver, British Columbia
V6C 3R8

is authorized to discharge refuse to the land from the NorskeCanada pulp and paper mill operation located near Crofton, 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 PR-07399 issued under Part 2 Section 10 of the *Waste Management Act*.

1. AUTHORIZED DISCHARGES

- 1.1 Industrial refuse from the pulp and paper mill operation is authorized for discharge at a maximum rate of 44,000 m³/a.
- 1.2 The landfill facility is located in the remainder of Section 3, Range 9, Chemainus Land District and Lot 1, Plan 12168, Sections 3 and 4, Range 9, Chemainus Land District. The discharge of refuse is restricted to areas identified as Block 1 5.9 hectares, Block 2 2.3 hectares and Block 2B 7.9 hectares (approximately 16.1 hectares for all blocks), approximately located as shown on attached Site Plan A.
- 1.3 The components of the refuse and the blocks within the landfill facility to which these components may be discharged are identified as follows:

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Component	Discharge rate – m³/a	Block
ash from #4 Power Boiler	43,000	Block 2
		Block 2B
sediments from mill-yard stormwater collection	1,000	Block 1
facilities		
unusable woodwaste		
unusable or non-recyclable construction/demolition		
debris		
non-recyclable fibreglass debris		,
unsalvageable scrap metal		
mineral soil		

The discharge of refuse to Block 2 is authorized up to the elevation of 92.7 metres above sea level (ASL); further discharge of refuse to Block 2 is subject to subsection 2.3.

1.4 Prior to the discharge of refuse to the blocks identified below, the authorized works and related appurtenances, approximately located as shown on the attached Site Plan A, must be complete and operational as follows:

Block	Authorized Works	
Block 1	upstream surface water collection and diversion system*	
	leachate collection and conveyance system**	
Block 2	upstream surface water collection and diversion system*	
	geomembrane liner to protect the existing surface water collection	
	and diversion system along the southern boundary of Block 2	
	upon commencement of discharge to Block 2B	
	 detention pond applicable to Block 2 and Block 2B upon 	
	commencement of discharge to Block 2B ***	
	 leachate collection and conveyance system** 	
Block 2B	upstream surface water collection and diversion system*	
	 detention pond applicable to Block 2 and Block 2B *** 	
	leachate collection and conveyance system**	
	geomembrane liner	
	groundwater collection and diversion system*	
	geosynthetic clay liner (or equivalent) underlying the	
	geomembrane liner and extending 5 metres beyond the perimeter	
	of the groundwater collection zone(s)	

^{*}directed to Dunne Brook

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^{**}for discharge to the mill effluent treatment system as authorized in Permit PE-00114

^{***}designed for a one in ten year storm return period

2. LANDFILL FACILITY OPERATION

2.1 Water License

The discharge of refuse to Block 2B shall not commence prior to the cancellation of Conditional Water License 102957 for Lot A, Plan 22679.

2.2 Control of Windblown Debris and Fugitive Dust

The permittee shall suppress windblown debris and fugitive dust created within the landfill facility area to the satisfaction of the Regional Waste Manager.

2.3 Block 2 Environmental Impact Assessment

At least one year prior to the planned vertical expansion of Block 2 above 92.7 metres ASL, the permittee shall notify the Regional Waste Manager and submit a comprehensive assessment of the environmental impact of Block 2. The scope of the environmental impact assessment shall be to the satisfaction of the Regional Waste Manager. Upon review of the assessment, the Regional Waste Manager may require that the permittee take additional measures for the protection of the environment prior to the vertical expansion of Block 2.

2.4 Final Elevation and Slope

The final elevation of Block 1 shall not exceed the highest natural ground elevation within that block and the final slopes shall be between 4% grade and 33% grade. The final elevation of Block 2 and Block 2B shall not exceed 103 metres ASL and the final slopes shall be between 3% grade and 33% grade.

2.5 Buffer Zone

Refuse shall not be placed within 15 metres of the property boundaries.

2.6 Maintenance of Works and Emergency Procedures

The permittee shall inspect the authorized works regularly and maintain them in good working order. In the event of an emergency or condition beyond the control of the permittee which prevents continuing operation of the authorized works, the permittee shall take appropriate remedial action and immediately notify the Regional Waste Manager.

3. GENERAL REQUIREMENTS

3.1 Qualified Professionals

All designs, plans, works, programs, investigations, assessments and reports for this landfill facility must be submitted by a qualified professional.

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3.2 Site Development and Operating Plan

A site development and operating plan shall be submitted to the Regional Waste Manager at least 30 days prior to the commencement of discharge of refuse to Block 2B. The plan shall be kept current by the permittee and made available for inspection. The plan shall address but not be limited to all applicable provisions of the "Landfill Criteria for Municipal Solid Waste, British Columbia, June 1993" and other elements as may be required by the Regional Waste Manager.

3.3 Closure and Post-closure Plan

A closure and post-closure plan for the landfill facility that addresses, but is not limited to the "Landfill Criteria for Municipal Solid Waste, British Columbia, June 1993", shall be submitted to the Regional Waste Manager for review at least five years prior to the planned closure date for the landfill facility.

4. MONITORING AND REPORTING

4.1 Monitoring Program

- **4.1.1** The monitoring program as specified in PR-07399 dated June 23, 1993, shall continue until superseded by a monitoring program subject to subsections 4.1.2, 4.1.3, 4.1.4 and 4.1.5.
- 4.1.2 The permittee shall monitor for impacts or potential impacts of Block l, Block 2, and Block 2B on the environment according to a monitoring program as required by the Regional Waste Manager.
- **4.1.3** The monitoring program shall identify the parameters of interest, the locations of monitoring wells for the upper and lower groundwater aquifers, surface water sampling sites, air quality monitoring stations and sampling frequencies.
- 4.1.4 The monitoring program shall address, but not be limited to subsections 4.1 and 7.15 of the "Landfill Criteria for Municipal Solid Waste, British Columbia, June 1993" and the "Guidelines for Environmental Monitoring at Municipal Solid Waste Landfills, British Columbia, January 1996".
- 4.1.5 The proposed monitoring program shall be submitted to the Regional Waste Manager within 90 days of the date of this permit.

4.2 Sampling and Analytical Procedures

Sampling shall be carried out in accordance with the procedures described in the "British Columbia Field Sampling Manual for Continuous Monitoring Plus the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples, 1996 Edition (Permittee)", or by suitable alternative procedures as authorized by the Regional Waste Manager.

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Analyses are to be carried out in accordance with procedures described in the "British Columbia Environmental Laboratory Manual for the Analysis of Water, Wastewater, Sediment and Biological Materials (March 1994 Permittee Edition)", or by suitable alternative procedures as authorized by the Regional Waste Manager.

Copies of the above manuals 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.

4.3 Reporting Schedule

The permittee shall submit reports to the Regional Waste Manager as follows:

Report	Date/Frequency of Submission
A site development and operating plan	at least 30 days prior to the
	commencement of discharge of
	refuse to Block 2B.
A proposed monitoring program subject to	within 90 days of the date of this
subsection 4.1	permit.
The results from the required monitoring	once each quarter within 45 days
program*	following the quarter in which the
	monitoring was undertaken.
A review and interpretation of the monitoring	on or before June 30 of each year.
data obtained during the previous calendar	The first report is due June 30, 2004.
year with recommendations for changes to the	
monitoring program or additional measures	
for the protection of the environment	
A comprehensive environmental impact	at least one year prior to the
assessment of Block 2 subject to	planned vertical expansion of Block
subsection 2.3	2 above 92.7 metres ASL.
A closure and post-closure plan for the	at least five years prior to the
landfill facility	planned closure date for the landfill
	facility.

^{*}The Regional Waste Manager may require that data be submitted in a format suitable for entry into the Ministry of Water, Land and Air Protection computer data base.

4.4 Other Requirements

Based on receiving environment monitoring data or other information, the permittee may be required by the Regional Waste Manager to take additional measures for the protection of the environment.

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