



MINISTRY OF ENVIRONMENT,  
LANDS AND PARKS

## PERMIT

*Under the Provisions of the Waste Management Act*

Fletcher Challenge Canada Limited  
P.O. Box 10058, Pacific Centre  
9th Floor, 700 West Georgia Street  
Vancouver, British Columbia


V7Y 1J7

is authorized to discharge effluent from a pulp and paper mill located at Crofton, British Columbia to Stuart Channel 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.

1. SPECIFIC AUTHORIZED DISCHARGES AND RELATED REQUIREMENTS

- 1.1 Process effluent, woodroom hydraulic debarker effluent (upon cessation of the discharge authorized by Section 1.2), sanitary effluent, landfill leachate and storm water runoff identified as 01 through submerged outfalls N (north) and S (south) as shown on the attached Appendix A-1.

1.1.1 The maximum rate at which the effluent may be discharged is 230 000 m<sup>3</sup>/d.

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 1 of 14

Permit No. PE-114

1.1.2 Prior to the cessation of the discharge authorized by Section 1.2, the characteristics of the effluent shall be equivalent to or better than:

pH Range	5.0-8.0
96h LC50 Toxicity	100 %

	Daily Maximum	Monthly Average
Total Suspended Solids (TSS)	$(18.75 \times \text{PROD-820}) \times 1000$ mg/L EFF	$(11.25 \times \text{PROD-820}) \times 1000$ mg/L EFF
	46 100 kg/d	27 300 kg/d
5-day Biochemical Oxygen Demand (BOD <sub>5</sub> )	$(7.5 \times \text{PROD-820}) \times 1000$ mg/L EFF	$(7.5 \times \text{PROD-820}) \times 1000$ mg/L EFF
	17 900 kg/d	17 900 kg/d
Adsorbable Organic Halogens (AOX)	$3.8 \times \text{CBPROD} \times 1000$ mg/L EFF	$2.5 \times \text{CBPROD} \times 1000$ mg/L EFF


1.1.3 After cessation of the discharge authorized by Section 1.2, the characteristics of the effluent shall be equivalent to or better than:

pH Range	5.0-8.0
96h LC50 Toxicity	100 %

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 2 of 14


  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114

	Daily Maximum	Monthly Average
Total Suspended Solids (TSS)	$\frac{18.75 \times \text{PROD} \times 1000}{\text{EFF}}$ mg/L 46 900 kg/d	$\frac{11.25 \times \text{PROD} \times 1000}{\text{EFF}}$ mg/L 28 200 kg/d
5-day Biochemical Oxygen Demand (BOD <sub>5</sub> )	$\frac{7.5 \times \text{PROD} \times 1000}{\text{EFF}}$ mg/L 18 800 kg/d	$\frac{7.5 \times \text{PROD} \times 1000}{\text{EFF}}$ mg/L 18 800 kg/d
Adsorbable Organic Halogens (AOX)	$\frac{3.8 \times \text{CBPROD} \times 1000}{\text{EFF}}$ mg/L	$\frac{2.5 \times \text{CBPROD} \times 1000}{\text{EFF}}$ mg/L

Notes:

- (a) "96h LC50 toxicity" means the calculated concentration of neutralized effluent that is lethal to 50% of the test fish (rainbow trout (Oncorhynchus mykiss)) during a 96 hour exposure.
- (b) "Monthly average" is the arithmetic average of the test values collected during the calendar month.
- (c) "EFF" means, subject to subsection (g), the 90th percentile of the rate of effluent, expressed as m<sup>3</sup>/d, discharged from the mill, determined by the use of statistical methods, and using a period of time approved by the Regional Waste Manager for determination of the 90th percentile of the rate of discharge of effluent.
- (d) "PROD" means, subject to subsection (g), the 90th percentile of the daily production rate of the mill, expressed as ADt, determined by use of statistical methods, and using a period of time approved by the Regional Waste Manager for determination of the 90th percentile of the rate of production.
- (e) "CBPROD" means, subject to subsection (g), the 90th percentile of the daily production rate of bleached pulp produced from an on-site bleach plant with the use of chlorine or chlorine compounds, or both

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 3 of 14

Permit No. PE-114

chlorine and chlorine compounds, expressed as ADt, determined by the use of statistical methods, and using a period of time approved by the Regional Waste Manager for determination of the 90th percentile of the rate of chlorine or chlorine compound bleached pulp production.

- (f) "ADt" means an air dry tonne of pulp and paper product where the weight of the product is corrected to reflect the weight that the product would be if the product were composed of 10% water and 90% fibre.
- (g) If there is an insufficient number of days of production to perform a valid 90th percentile calculation of CBPROD, EFF or PROD, the Regional Waste Manager may use the mill's chlorine or chlorine compound bleached pulp production design figure, effluent flow design figure or production design figure respectively as values for CBPROD, EFF or PROD until such time as these parameters may be calculated in accordance with subsections (c), (d) and (e).
- (h) None of the individual limits for TSS and BOD<sub>5</sub> are to be exceeded.


1.1.4 The works authorized are an activated sludge treatment plant for CTMP effluent, storm water runoff collection and pumping system, two woodroom settling ponds used alternately (also authorized in Section 1.2.3), spill control system including two spill and equalization tanks, primary clarifier, effluent cooling system, oxygen activated sludge treatment system (UNOX) consisting of a reactor and three secondary clarifiers, two foam control tanks, two submerged outfalls with diffusers and related appurtenances approximately located as shown on the attached Appendix A-1.

1.1.5 The works authorized must be complete and in operation on and from the date of this amended permit. The activated sludge treatment plant for CTMP effluent may be shut down in the future.

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 4 of 14

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114

- 1.2 Woodroom hydraulic debarker effluent identified as 06 and 07 through outfalls 6 and 7 as shown on the attached Appendix A-1.

1.2.1 The maximum rate at which the effluent may be discharged is 15 900 m<sup>3</sup>/d.

1.2.2 The characteristics of the effluent shall be equivalent to or better than:

96h LC50 Toxicity	100 %
Total Suspended Solids (TSS)	820 kg/d (daily maximum)
5-day Biochemical Oxygen Demand (BOD <sub>5</sub> )	820 kg/d (daily maximum)

Note: "96h LC50 toxicity" means the calculated concentration of neutralized effluent that is lethal to 50% of the test fish (rainbow trout (*Oncorhynchus mykiss*)) during a 96 hour exposure.

1.2.3 The works authorized are two settling ponds used alternately (also authorized in Section 1.1.4) and two outfalls approximately located as shown on the attached Appendix A-1.

1.2.4 The works authorized must be complete and in operation on and from the date of this amended permit.

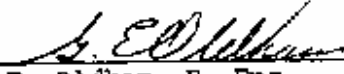
1.2.5 These discharges shall cease on December 31, 1995 however, based upon the results of the monitoring program and/or other information, the Permittee may be required to cease these discharges at an earlier date.

- 1.3 Overflow from the foreshore storm water collection and pumping system (authorized in Section 1.1.4) identified as 04 and 05 through outfalls 4 and 5 respectively as shown on the attached Appendix A-1.

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 5 of 14

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114

1.3.1 The maximum rate at which the effluent may be discharged is indeterminate.

1.3.2 The characteristics of the effluent shall be equivalent to or better than:

96h LC10	
Toxicity	100 %

Note: A 96h LC10 toxicity value of 100% means that, in a static bioassay on the test fish (rainbow trout (*Oncorhynchus mykiss*)), there shall be no greater than 10% mortality in 100% effluent concentration after 96 hours exposure.

1.3.3 The works authorized are a storm water conveyance system, two foreshore outfalls and related appurtenances approximately located as shown on the attached Appendix A-1.

1.3.4 An overflow from the foreshore storm water collection and pumping system through outfalls 4 and 5 is authorized only when the capacity of the pumping system is exceeded as a result of extreme precipitation events.

1.3.5 The works must be complete and in operation on and from the date of this amended permit.

1.4 Water treatment plant backwash effluent identified as 03 as shown on the attached Appendix A-1.

1.4.1 The maximum rate at which the effluent may be discharged is 2300 m<sup>3</sup>/d.

1.4.2 The characteristics of the effluent shall be equivalent to or better than typical filter backwash from a water treatment plant using aluminum sulfate.

1.4.3 The works authorized are a conveyance pipe and surface drainage ditch, and related appurtenances approximately located as shown on the attached Appendix A-1.

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 6 of 14

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114

- 1.4.4 The works must be complete and in operation on and from the date of this amended permit.
- 1.5 Storm water runoff effluent (general mill parking area) and cooling water identified as O2 through submerged outfalls N (north) and S (south) as shown on the attached Appendix A-1.

1.5.1 The maximum rate at which the effluent may be discharged is indeterminate.

1.5.2 The characteristics of the effluent shall be equivalent to or better than:

96h LC10 Toxicity	100 %
----------------------	-------

Note: A 96h LC10 toxicity value of 100% means that, in a static bioassay on the test fish (rainbow trout (*Oncorhynchus mykiss*)), there shall be no greater than 10% mortality in 100% effluent concentration after 96 hours exposure.


1.5.3 The works authorized are storm water conveyance and cooling water collection systems and related appurtenances approximately located as shown on the attached Appendix A-1.

1.5.4 The works must be complete and in operation according to the following schedule:

- (a) Existing works - on and from the date of this amended permit; and
- (b) Cooling water collection system - when the discharge of cooling water commences.

## 2. WAIVER

If, in the opinion of the Regional Waste Manager, the Permittee is unable to comply with the requirements specified in this amended permit because of unforeseen circumstances the Regional Waste Manager may, in writing, grant a short term waiver from all or part of these requirements.

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 7 of 14

Permit No. PE-114

3. TOTAL LOAD CONCEPT

The allowable daily discharge of TSS and BOD<sub>5</sub> is based on the mill production rate of 2500 ADt/d. This figure represents the 90th percentile level determined from the production design figures for the combined kraft, mechanical and CTM pulp. The woodroom production rate for the purpose of this calculation is 1280 m<sup>3</sup>/d.

3.1 Mill Effluent (Sections 1.1.2 and 1.1.3)

At allowable levels of 18.75 kg/ADt for TSS and 7.5 kg/ADt for BOD<sub>5</sub> (daily maximums), 11.25 kg/ADt for TSS and 7.5 kg/ADt for BOD<sub>5</sub> (monthly averages), and the maximum total load for both TSS and BOD<sub>5</sub> in the woodroom effluent of 820 kg/d the total load is computed as follows:

3.1.1 Section 1.1.2.

$$\begin{aligned} \text{TSS} &= 18.75 \times 2500 - 820 = 46\ 100 \text{ kg/d (rounded off} \\ &\quad \text{from 46\ 055 kg/d)} \\ &11.25 \times 2500 - 820 = 27\ 300 \text{ kg/d (rounded off} \\ &\quad \text{from 27\ 305 kg/d)} \\ \text{BOD}_5 &= 7.5 \times 2500 - 820 = 17\ 900 \text{ kg/d (rounded off} \\ &\quad \text{from 17\ 930 kg/d)} \end{aligned}$$


3.1.2 Section 1.1.3.

$$\begin{aligned} \text{TSS} &= 18.75 \times 2500 = 46\ 900 \text{ kg/d (rounded off} \\ &\quad \text{from 46\ 875 kg/d)} \\ &11.25 \times 2500 = 28\ 200 \text{ kg/d (rounded off} \\ &\quad \text{from 28\ 125 kg/d)} \\ \text{BOD}_5 &= 7.5 \times 2500 = 18\ 800 \text{ kg/d (rounded off} \\ &\quad \text{from 18\ 750 kg/d)} \end{aligned}$$

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 8 of 14

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114



3.2 Woodroom Effluent (Section 1.2.2)

At allowable levels of 0.64 kg/m<sup>3</sup> for both TSS and BOD<sub>5</sub>, the daily maximum total load is computed as follows:

$$\text{TSS} = 1280 \times 0.64 = 820 \text{ kg/d}$$

$$\text{BOD}_5 = 1280 \times 0.64 = 820 \text{ kg/d}$$

The assessed mill output of 2500 ADt/d and 1280 m<sup>3</sup>/d of woodroom production is subject to revision at any time, when production data indicates that the mill's performance differs significantly from the past pattern. This does not imply, however, that an increase in the mill output will warrant an increase in the total allowable discharge for any of the parameters.

4. EFFLUENT UPGRADING

The Permittee may be required to provide additional treatment facilities for the discharge authorized in Section 1.4 based on the results of the monitoring specified in Section 13 and/or other information obtained in connection with this discharge.

5. LOCATION OF FACILITIES

Chemainus District and Municipality of North Cowichan Parcel D (DD 105460-1) of Sections 5 & 6; Range 10, Lot 1 of Sections 4 & 5; Range 10, Plan 8971, Lot 5 of Section 4; Range 10, Composite Plan 3198 except Plans 8791 and 484 BL, Lot 104, Lots 475, 407, and 506 and Plan 974 Cowichan Land District and portion of Range 9, Section 3 and Section 4.

6. MAINTENANCE OF WORKS AND EMERGENCY PROCEDURES

The Permittee shall inspect the pollution control works regularly and maintain them in good working order. In the event of an emergency or condition which prevents continuing operation of the approved method of pollution control, the Permittee shall immediately notify the Regional Waste Manager and take appropriate remedial action. The Permittee may be required to reduce or suspend production to protect the environment while correcting the situation.

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 9 of 14

  
\_\_\_\_\_  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114

7. BYPASSES

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

8. PROCESS MODIFICATIONS

The Permittee shall notify the Regional Waste Manager prior to implementing changes to any process that may affect the quality and/or quantity of the discharges.

9. SECONDARY EFFLUENT TREATMENT SLUDGE

The disposal of secondary treatment sludges by incineration is subject to an evaluation by the Ministry of Environment, Lands and Parks. Based on the results of this evaluation, the Regional Waste Manager may request an alternate disposal method.

10. FOAM

Should objectionable amounts of foam, attributable to any effluent, occur on the receiving waters, additional treatment shall be provided to reduce the amount of foam producing agents in the effluent prior to discharge when so directed in writing by the Regional Waste Manager.

11. COLOUR

Should colour, attributable to any effluent, become an objectionable feature in the receiving waters, additional treatment shall be provided to remove colour forming constituents from the effluent prior to discharge when so directed in writing by the Regional Waste Manager.

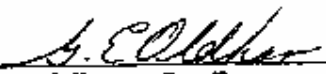
12. NUTRIENTS

Should nutrients be added to increase the efficiency of any biological treatment system, the quantity of nutrients shall be controlled so that excess nutrients are not discharged to the receiving waters. The ratio of BOD<sub>5</sub>:N:P shall be recorded and data kept available for inspection.

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 10 of 14

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114

13. SAMPLING AND ANALYSIS

The Permittee shall maintain suitable effluent sampling facilities and obtain samples and analyses as follows:


Parameter	Type and Frequency of Sampling				
	Sampling Sites (Appendix A-1)				
	01	02	03	04 and 05	06 and 07
pH	CONT	CONT	--	G/M	--
Temperature	CONT or G/D	CONT or G/D	--	--	--
Toxicity 96h LC50	G/M	--	--	--	G/Q
Toxicity 96h LC10	--	G/M	--	G/M	--
TSS	DC/D	G/M	G/W	G/M	G/D
BOD <sub>5</sub>	DC/2D	G/M	--	G/M	G/W
AOX	DC/W	--	--	--	--
Oil & Grease	--	G/M	--	G/M	--
Aluminum (Tot. and diss.)	--	--	G/W	--	--

CONT = continuous monitoring      2D = every second day  
 G = grab sample                      D = daily  
 DC = daily composite sample      M = monthly  
 W = weekly                              Q = quarterly

Notes:

- (a) Samples should be obtained and analyzed as required from sites identified as 06 and 07 until the discharges cease.
- (b) Samples shall be taken at sites identified as 02, 04 and 05 at the specified frequency as flows allow.

Based on the results of the effluent monitoring program and/or the data obtained from the receiving environment monitoring program specified in Section 17 the effluent monitoring requirements may be extended or altered by the Regional Waste Manager.

  
 G. E. Oldham, P. Eng.  
 Regional Waste Manager

Date issued: March 3, 1965

Date amended: JUN 07 1993  
 (most recent)

Page: 11 of 14

Permit No. PE-114

14. FLOW MEASUREMENT

The Permittee shall provide and maintain suitable flow measuring devices as specified by the Regional Waste Manager and record daily the volume of effluent for the discharges authorized in Sections 1.1, 1.2, 1.4 and 1.5 discharged over a 24-hour period.

15. SAMPLING METHODS FOR COMPLIANCE DETERMINATION

The compliance sampling method used to provide samples of effluent authorized in Section 1.1 for determination of BOD<sub>5</sub>, TSS and AOX shall consist of collecting an effluent sample during a period of 24 hours by taking a composite of equal samples in the outlet from the secondary treatment facility (UNOX) identified as 01 as shown on the attached Appendix A-1, at least every 15 minutes. Subject to Section 16, the Regional Waste Manager may specify an alternate sampling method for compliance determination in the future.

16. SCIENTIFIC SAMPLING METHOD EVALUATION

The Permittee shall, on June 30, 1992, and continuing for a 13-month period, commence collection of data pertaining to the discharge of effluent authorized in Section 1.1 for a scientific evaluation to determine the relationship between 3 sampling methods.

The three sampling methods are:


- (a) the compliance sampling method specified in Section 15;
- (b) the collection of an effluent sample for 6 hours using the technique described in Section 15; and
- (c) the grab sampling method for determination of BOD<sub>5</sub>, TSS and AOX.

The Regional Waste Manager may establish multipliers to relate the sampling methods under subsection (a), (b), and (c) for the purpose of establishing and specifying an alternate sampling method for compliance determination in the future.

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 12 of 14

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114

17. RECEIVING ENVIRONMENT MONITORING

A receiving environment monitoring program shall be carried out to determine the following factors:

1. The zone of influence of the effluent;
2. The receiving water quality;
3. The effects of effluent discharge on the receiving water biological community.

The program shall be carried out in accordance with requirements specified by the Regional Waste Manager. It is expected that these requirements will be developed in consultation with other government agencies. Based on the results of the monitoring program or other information, the monitoring requirements may be extended or altered by the Regional Waste Manager in the future.

18. SAMPLING AND ANALYTICAL PROCEDURES

Sampling and flow measurements shall be carried out in accordance with the procedures described in "Field Criteria for Sampling Effluents and Receiving Waters", April 1989, or by suitable alternative procedures as authorized by the Regional Waste Manager.

Analyses are to be carried out in accordance with procedures described in "A Laboratory Manual for the Chemical Analysis of Waters, Wastewaters, Sediments and Biological Materials, (1976 edition including updates)", April 1989, or by suitable alternative procedures as authorized by the Regional Waste Manager.

Analyses for determining the toxicity of liquid effluents to fish shall be carried out in accordance with the procedures described in the "Provincial Guidelines and Laboratory Procedures for Measuring Acute Lethal Toxicity of Liquid Effluents to Fish" November 1982. The Regional Waste Manager will advise the Permittee which method of measurement for expressing lethal toxicity shall be used. The method of sampling and the method of bioassay will be determined by the Regional Waste Manager.

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 13 of 14

  
G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114

Copies of the above manuals are available from the Environmental Protection Division, Ministry of Environment, Lands and Parks, 777 Broughton Street, Victoria, British Columbia, V8V 1X4, at a cost of \$20.00, \$70.00 and \$5.00 respectively, and are also available for inspection at all Environmental Protection offices.

19. SPILL REPORTING

All spills to the environment (as defined in the Spill Reporting Regulation) shall be reported immediately in accordance with the Spill Reporting Regulation. Notification shall be via the Provincial Emergency Program at 1-800-663-3456.

20. REPORTING

Maintain effluent and receiving environment monitoring data, flow measurements and production figures for inspection and submit the data monthly, to the Regional Waste Manager. The Regional Waste Manager may request that data be submitted in a machine readable format suitable for entry in the Ministry of Environment, Lands and Parks computer base. The information shall be submitted within 30 days following the month in which the data was collected.

A summary of the results of the receiving environment monitoring program, including an interpretation of the effects on the receiving waters, is to be submitted annually in a report form which is suitable for release to the public. The annual report is due on March 31 for the period January to December of the previous year.

Date issued: March 3, 1965

Date amended: JUN 07 1993  
(most recent)

Page: 14 of 14



G. E. Oldham, P. Eng.  
Regional Waste Manager

Permit No. PE-114

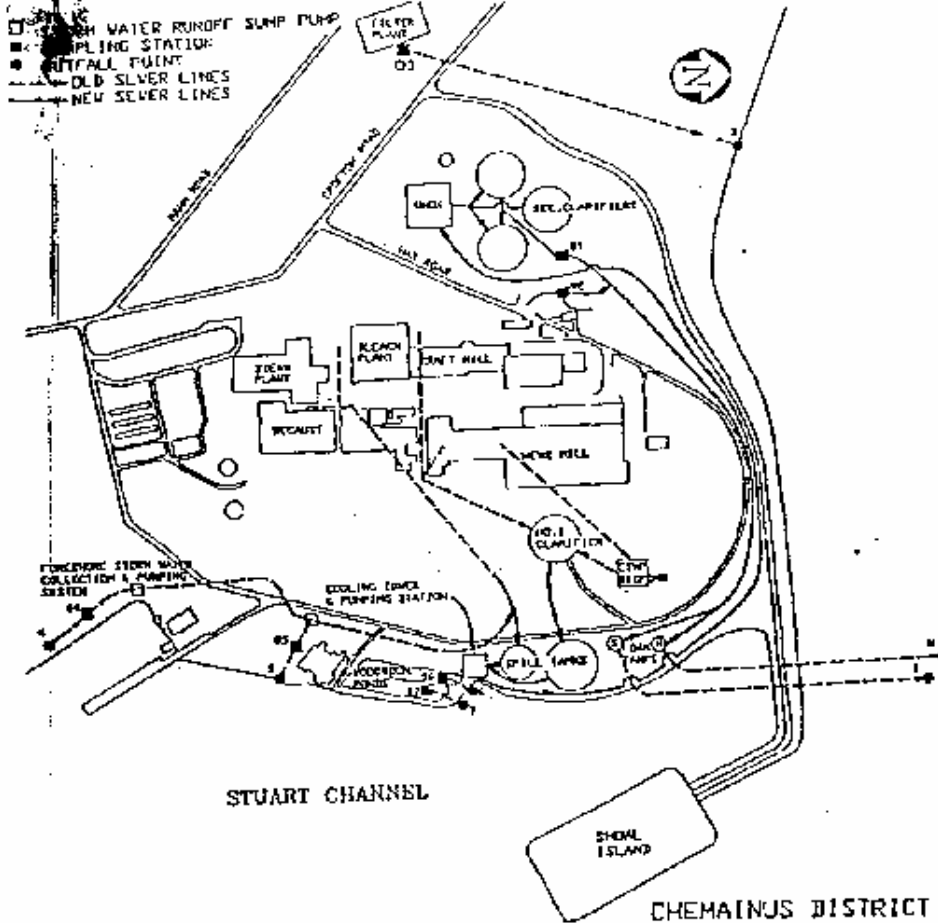


Province of  
British Columbia

Ministry of  
Environment  
Lands & Parks

ENVIRONMENTAL PROTECTION

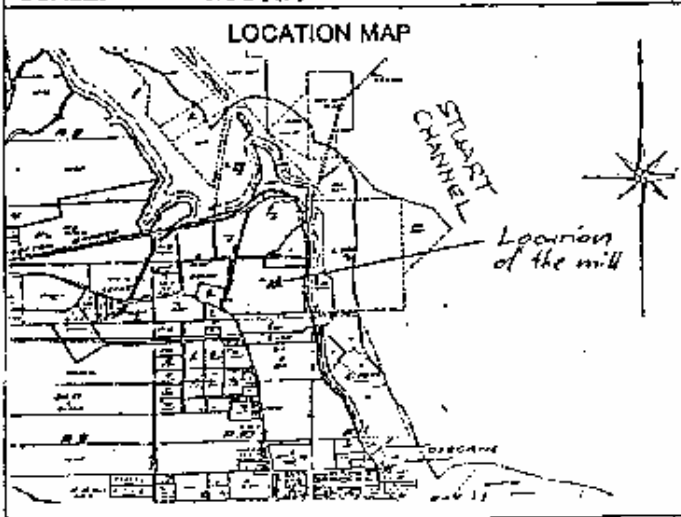
SITE PLAN



CHEMAINUS DISTRICT AND MUNICIPALITY  
OF NORTH COVICHAN, PARCEL D0DD 105460-1;  
OF SECTION 5 & 6; RANGE 10, LOT 1 OF  
SECTION 4 & 5; RANGE 10, PLAN 8971,  
LOT 5 OF SECTION 4; RANGE 10, COMPOSITE  
PLAN 3918 EXCEPT PLANS 8791 AND 484 BL,  
LOT 104, LOTS 475, 487 AND 506 AND PLAN  
974 COVICHAN LAND DISTRICT, AND PORTION  
RANGE 9, SECTION 3 AND SECTION 4

SCALE: N.T.S.

LEGAL DESCRIPTION:



Fletcher Challenge Canada Limited

Name of Permittee

Appendix A-1 to Permit No. PE-114

Approval No.

Date issued May 17, 1988

Date Amended JUN 07 1993

Regional Waste Manager



BRITISH COLUMBIA

MAY 20 1988

File: PE-00114

Fletcher Challenge Canada Limited  
PO Box 70  
Crofton BC V0R 1R0

Dear Permittee:

Re: Waste Management Permit PE-00114

As required in Subsection 1.1 of Permit PE 00114, last amended on MAY 20 1988 the following values have been established:

PROD	2 328 ADt/d
CBPROD	1 158 ADt/d
EFF <sub>1</sub>	168 900 m <sup>3</sup> /d
EFF <sub>2</sub>	94 200 m <sup>3</sup> /d

Note: EFF<sub>1</sub> is the rate of effluent discharged when both the newsmill and kraft mill are in operation  
 EFF<sub>2</sub> is the rate of effluent discharged when the newsmill is down.

Using these values, the concentration limits in Subsection 1.1.3 are now specified as follows:

	<u>Daily maximum</u> (mg/l)	<u>Monthly average</u> (mg/l)
TSS	259	100
BOD <sub>5</sub>	104	50

Ministry of  
Environment,  
Lands and Parks

Environment and Lands  
Vancouver Island Region

Mailing Address:  
2080-A Lahcux Road  
Nanaimo BC V9T 5J9

Telephone: (250) 751-3110  
Facsimile: (250) 751-3113

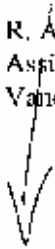


These concentration requirements supersede the requirements specified in our letter dated February 2, 1996.

It is anticipated that the values for PROD, CBPROD,  $\text{HFC}_1$  and  $\text{HFC}_2$  will be adjusted from time to time, based upon updated operating information.

Yours truly,

R. A. Bollans, P.Eng.  
Assistant Regional Waste Manager  
Vancouver Island Region





Date: MAY 20 1998

File: PE-00114

Fletcher Challenge Canada Limited  
PO Box 10058, Pacific Centre  
700 Georgia St W  
Vancouver BC V7Y 1J7

Dear Permittee:

Re: Application pursuant to Waste Management Act on behalf of Fletcher Challenge  
Canada Limited dated May 22, 1997

Pursuant to Section 13 of the Waste Management Act, Permit PE-00114, last amended on November 16, 1995 is hereby amended:

- (a) by deleting the monthly average Total Suspended Solids (TSS) and 5-day Biochemical Oxygen Demand (BOD<sub>5</sub>) criteria specified in Subsection 1.1.3 and substituting in their place the following values:

	<u>Monthly Average</u>
TSS	<u>7.26xPRODx1000 mg/l</u> EFF  18 150 kg/d
BOD <sub>5</sub>	<u>3.63xPRODx1000 mg/l</u> EFF  9 075 kg/d

- (b) by deleting the reference to the method of computing the total BOD<sub>5</sub> and TSS load in Subsection 3.1 and substituting in its place the following:

.../2

Ministry of  
Environment,  
Lands and Parks

Environment and Lands  
Vancouver Is and Region

Mailing Address:  
2080-A Lahieux Road  
Nanaimo BC V9T 6J3

Telephone: (250) 751-3100  
Facsimile: (250) 751-3103

At allowable levels of 18.75 kg/ADt for TSS and 7.5 kg/ADt for BOD<sub>5</sub> (daily maximums), 7.26 kg/ADt for TSS and 3.63 kg/ADt for BOD<sub>5</sub> (monthly averages) and the maximum total load for both TSS and BOD<sub>5</sub> in the woodroom effluent of 820 kg/d the total load is computed as follows:

(c) by deleting from Subsection 3.1.2:

$$\text{TSS} = 11.25 \times 2500 = 28\,200 \text{ kg/d (rounded off from } 28\,125 \text{ kg/d)}$$

and substituting in its place:

$$\text{TSS} = 7.26 \times 2\,500 = 18\,150 \text{ kg/d}$$

(d) by adding to Subsection 3.1.2:

$$\text{BOD}_5 = 3.63 \times 2\,500 = 9\,075 \text{ kg/d}$$

All other terms and conditions of the permit shall remain in full force and effect.

Yours truly,



R. A. Bollans, P.Eng.  
Assistant Regional Waste Manager  
Vancouver Island Region