

September 20, 2017 Tracking Number: 355707 Authorization Number: 1902

REGISTERED MAIL

Catalyst Paper Corporation and Catalyst Pulp Operations Limited doing business as Catalyst Paper, General Partnership 2nd Floor, 3600 Lysander Lane Richmond BC V7B 1C3

Dear Permittee:

Enclosed is Amended Permit 1902 issued under the provisions of the *Environmental Management Act*. Your attention is respectfully directed to the terms and conditions outlined in the permit. An annual fee will be determined according to the 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. This permit is issued pursuant to the provisions of the *Environmental Management Act* to ensure compliance with Section 120(3) of that statute, which makes it an offence to discharge waste, from a prescribed industry or activity, without proper authorization. It is also the responsibility of the Permittee to ensure that all activities conducted under this authorization are carried out with regard to the rights of third parties, and comply with other applicable legislation that may be in force.

This decision may be appealed to the Environmental Appeal Board in accordance with Part 8 of the *Environmental Management Act*. An appeal must be delivered within 30 days from the date that notice of this decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

Please be advised that to meet reporting requirements in a form and manner acceptable to the Director, plans, reports and notifications related to the administration of this permit must be submitted electronically to the following ministry email addresses:

- EnvAuthorizationsReporting@gov.bc.ca, for monitoring and annual reports.
- EnvironmentalCompliance@gov.bc.ca, for non-compliance reports, notifications and emergency notifications.

Authorizations – South Region Telephone: (250) 751-3100 Facsimile: (250) 751-3103 For further information, including correspondence subject line and document naming conventions, please visit the ministry's Data and Report Submissions web page at http://www2.gov.bc.ca/gov/content/environment/waste-management/waste-dischargeauthorization/data-and-report-submissions

Additional requirements may also be specified by regulations under the Environmental Management Act including, but not limited to, Hazardous Waste Regulation, Spill Reporting Regulation, Contaminated Sites Regulation, Public Notification Regulation, and Environmental Data Quality Assurance Regulation.

Administration of this permit will be carried out by staff from the Environmental Protection Division's Regional Operations Branch. Plans, data and reports pertinent to the permit are to be submitted by email or electronic transfer to the Director, designated Officer, or as further instructed.

Yours truly,

Bryan Vroom

for Director, Environmental Management Act

Authorizations – South Region

Enclosure

cc: Environment Canada

Catalyst Paper Crofton Division. 8541 Hay Road, PO Box 70, Crofton, BC VOR 1R0



MINISTRY OF ENVIRONMENT

PERMIT

1902

Under the Provisions of the Environmental Management Act

Catalyst Paper Corporation and Catalyst Pulp Operations Limited doing business as Catalyst Paper, General Partnership

2nd Floor, 3600 Lysander Lane Richmond BC V7B 1C3

is authorized to discharge air contaminants to the air from a pulp and paper mill located in Crofton, British Columbia, subject to the terms and conditions listed below. Contravention of any of these conditions is a violation of the *Environmental Management Act* and may lead to prosecution.

This permit supersedes and amends all previous versions of permit PA-01902 issued under Part 2, Section 14 of the *Environmental Management Act*.

1. <u>AUTHORIZED DISCHARGES</u>

1.1 This Subsection applies to the discharge of air contaminants from #3 RECOVERY BOILER (RB #3) through a stack identified as 2 as shown on the attached Site Plan A/B.

The site reference number for this discharge is E100154.

- **1.1.1** The maximum authorized rate of discharge is 4400 m³/min continuously.
- **1.1.2** The characteristics of the discharge must not exceed the limits as follows:

Parameter	Limit
Total Particulate Matter	135 mg/m ³ — maximum
	corrected to flue gas concentration of 6%
	oxygen (O ₂) by volume
Total Reduced Sulphur	5.0 mg/m ³ — daily average
(TRS) as H ₂ S	

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- **1.1.3** The authorized works are non-direct contact black liquor concentrator and evaporators (also authorized in Subsection 1.2.3), electrostatic precipitator, ducts, fans, stack and related appurtenances approximately located as shown on the attached Site Plan A/B.
- **1.1.4** The authorized works must be installed and operating during discharge.
- **1.1.5** The location of the facilities from which the discharge originates and the location of the point of discharge is Parcel D (DD 105460-1) of Sections 5 and 6, Range 10, Lot 1, of Sections 4 and 5, Range 10, Plan 8971, Lot 5, of Section 4, Range 10, Composite Plan 3198 Chemainus District and Municipality of North Cowichan except Plans 8971 and 484 BL, Lot 475, Cowichan District.
- **1.2** This Subsection applies to the discharge of air contaminants from #4 Recovery Boiler (RB #4) through a stack identified as 5 as shown on the attached Site Plan A/B.

The site reference number for this discharge is E217130.

1.2.1 The maximum authorized rate of discharge is: 7000 m³/min continuously when #3 and #4 Recovery Boilers are operating; and 9000 m³/min continuously when #4 Recovery Boiler is operating and #3 Recovery Boiler is not operating.

1.2.2 The characteristics of the discharge must not exceed the limits as follows:

Parameter	Limit – for each of	
	#3 & #4 Recovery Boilers	
	when both #3 & #4 Recovery Boilers are	
	operating	
Total Particulate Matter	135 mg/m ³ – maximum	
	corrected to flue gas concentration of	
	6% oxygen (O ₂) by volume	
Total Reduced Sulphur (TRS)	5.0 mg/m ³ – daily average	
as H ₂ S		
Parameter	Limit – for #4 Recovery Boiler	
	when #3 Recovery Boiler is not operating	
Total Particulate Matter	165 mg/m ³ – maximum	
	corrected to flue gas concentration of	
	6% oxygen (O ₂) by volume	
Total Dadwood Culmbury (TDC)	6.0 mg/m ³ – daily average	
Total Reduced Sulphur (TRS)	0.0 mg/m – dany average	

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- **1.2.3** The authorized works are non-direct contact black liquor concentrator and evaporators (also authorized in Subsection 1.1.3), electrostatic precipitator, ducts, fans, stack and related appurtenances approximately located as shown on the attached Site Plan A/B.
- **1.2.4** The authorized works must be installed and operating during discharge.
- **1.2.5** The location of the facilities from which the discharge originates and the location of the point of discharge is the same location as set out in Subsection 1.1.5.
- **1.3** This Subsection applies to the discharge of air contaminants from #4 POWER BOILER (PB #4) through a stack identified as 6 as shown on the attached Site Plan A/B.

The site reference number for this discharge is E100161.

1.3.1 The maximum authorized rate of discharge is 7000 m³/min continuously.

1.3.2 The characteristics of the discharge must not exceed the limits as follows:

Parameter	Limit
Total Particulate Matter	180 mg/m ³ — maximum
	165 mg/m ³ — rolling average of the
	immediately previous 4 quarterly sampling
	results corrected to flue gas concentration of
	12% carbon dioxide (CO ₂) by volume
PCDD (polychlorinated	500 pg/rn ³ TEQ - maximum based on
dibenzo-p- dioxins) &	NATO TEQ factors – International Toxicity
PCDF (polychlorinated	Equivalency Factor (I-TEF)
dibenzofurans)	
Sulphur Dioxide (SO ₂)	As specified in Sulphur Content of Fuel
	Regulation

1.3.3 The fuels authorized for use are clean wood, primary and secondary effluent treatment plant sludge, fuel oil, and natural gas.

Clean wood means wood fiber-based products and wood which do not contain plastics, gypsum, dry wall, fiberglass, asphalt or fiberglass shingles, biomedical waste, hazardous waste (as defined in the Hazardous Waste Regulation), paints, stains, coatings, and have not been treated with wood preservatives including but not limited to creosote, pentachlorophenol (PCP), chromated copper arsenate (CCA), ammoniacal copper arsenate (ACA).

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- **1.3.4** The authorized works are multi-cyclones, electrostatic precipitator, ducts, fans, stack and related appurtenances approximately located as shown on the attached Site Plan A/B.
- **1.3.5** The authorized works must be installed and operating during discharge.
- **1.3.6** The location of the facilities from which the discharge originates and the location of the point of discharge is the same location as set out in Subsection 1.1.5.
- 1.3.7 Power boiler stack testing must be carried out based on the 90th percentile wood-derived steam production. A 90th percentile for each stack test is determined from the preceding 90 consecutive days of steam production from either summer or winter seasons. Depending on the quarter in which the test occurs, the 90 day period, might include portions of both the current season and immediately preceding corresponding season. Seasons are defined as: summer May, June, July, August, September and October; and, winter November, December, January, February, March and April.
- **1.4** This Subsection applies to the discharge of air contaminants from **#5 POWER BOILER** (**PB #5**) through a stack identified as 7 as shown on the attached Site Plan A/B. The site reference number for this discharge is E212135.
 - **1.4.1** The maximum authorized rate of discharge is 2850 m³ /min continuously.
 - **1.4.2** The main fuel authorized for use is natural gas. Subject to the written approval and conditions of the director, fuel oil is authorized during specified period(s) as a contingent fuel when natural gas supply is curtailed due to causes outside Permittee's control. Records of fuel oil use must be kept available for ministry review. The use of fuel oil is subject to Section 2.5.
 - **1.4.3** The authorized works are fans, stack and related appurtenances approximately located as shown on Site Plan A/B.
 - **1.4.4** The authorized works must be installed and operating during discharge.
 - **1.4.5** The location of the facilities from which the discharge originates and the location of the point of discharge is the same location as set out in Subsection 1.1.5.

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1.5 This Subsection applies to the discharge of air contaminants from:
#1 & #2 LIME KILNS AND #3 & #4 RECOVERY BOILER SMELT DISSOLVING TANKS AND
MISCELLANEOUS SOURCES OF TOTAL REDUCED SULPHUR (TRS) identified as:

Source - #1 & #2 LIME KILNS AND #3 & #4	Point of Discharge	Site Reference
RECOVERY BOILER SMELT DISSOLVING TANKS	Site Plan A/B	Number
#1 & #2 Lime Kilns (combined stack)	1	E217132
#3 Recovery Boiler Smelt Dissolving Tank Stack	2a	0160019
#4 Recovery Boiler Smelt Dissolving Tank Stack	5a	E217131
TRS Emergency Stack	13	E266442
B-Seal Tank Vent	17	E265862
A-Brown Stock Washer Hood	19	E212142
B/K-Brown Stock Washer Hoods (combined)	18	E212143
A-Foam Tank & Seal Tanks Vent	20	E266443
All Miscellaneous TRS Sources	n/a	E100156

1.5.1 The maximum authorized rate of discharge -

#1 & #2 LIME KILNS is 1200 m³/min continuously.

The maximum authorized rate of discharge -

#3 & #4 RECOVERY BOILER SMELT DISSOLVING TANKS AND MISCELLANEOUS SOURCES OF TOTAL REDUCED SULPHUR (TRS) is 5570 m³/min continuously.

1.5.2 The characteristics of the discharges must not exceed the following limits:

Parameter	Source	Limit
Total Particulate	#1 & #2 Lime Kilns -	115 mg/m ³ maximum -
Matter	combined	corrected to flue gas
		concentration of 10%
		oxygen (O ₂) by volume
	#3 & #4 Recovery	0.2 kg/ADUt* maximum -
	Boiler Smelt Dissolving	each dissolving tank
	Tanks	
Total Reduced	All sources specified in	0.225 kg/ADUt*
Sulphur (TRS) as S	Subsection 1.5 - (except	maximum
	TRS Emergency Stack)	
Sulphur Dioxide	As specified in Sulphur Content of Fuel Regulation	
(SO_2)		

^{*}ADUt means an air dry tonne of unbleached pulp product where the weight of the pulp product is corrected to reflect the weight that the pulp product would be if the pulp were composed of 10% water and 90% fibre. Subject to Subsection 3.2, ADUt production is allocated to #3 & #4 Recovery Boiler Smelt Dissolving Tanks based on the ratio of the actual black liquor solids firing rates.

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- 1.5.3 The authorized works are an electrostatic precipitator for the lime kilns, wet scrubbers for the recovery boiler smelt dissolving tanks, stacks and related appurtenances, and a non-condensable gas (NCG) collection and treatment system and related appurtenances approximately located as shown on the attached Site Plan A/B. #1 & #2 Lime Kilns are authorized for incineration of concentrated non-condensable gas (CNCG), and #3 Recovery Boiler smelt dissolving tank scrubber is authorized as backup for treatment. #3 and #4 Recovery Boilers are authorized for incineration of dilute non-condensable gas (DNCG).
- **1.5.4** The authorized works must be installed and operating during discharge.
- **1.5.5** The location of the facilities from which the discharge originates and the location of the point of discharge is the same location as set out in Subsection 1.1.5.
- 1.6 This Subsection applies to the discharge of air contaminants from KRAFT PULP MACHINES, THERMOMECHANICAL PULP (TMP) MACHINES, NEWSPRINT MACHINES, MAINTENANCE SHOPS, LABORATORY VENTILATION, FUME HOODS, STORAGE TANK VENTS AND CONDENSING STEAM TURBINE GENERATOR COOLING TOWERS through stacks and vents collectively identified as 22 as shown on the attached Site Plan A/B.

The site reference number for these discharges is E 212149.

- **1.6.1** The maximum authorized rate of discharge is 81546 m³/min (wet basis). The authorized discharge period is continuous.
- 1.6.2 The characteristics of the discharge are of the nature originating from: the ventilation of buildings, the ventilation of tanks, the drying of pulp and newsprint and closed-loop cooling towers discharge that is typically air, water droplets including dissolved minerals naturally present and water conditioning additives for pH control and prevention of algal growth according to manufacturer specifications. Chromium-based water treatment chemicals are not to be used in the cooling towers system.
- **1.6.3** The authorized works are vents, ducts, seven-cell mechanical drift cooling tower, piping, stacks and related appurtenances approximately located as shown on the attached Site Plan A/B.
- **1.6.4** The authorized works must be installed and operating during discharge.
- **1.6.5** The location of the facilities from which the discharge originates and the location of the point of discharge is the same location as set out in Subsection 1.1.5.

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1.7 This Subsection applies to the discharge of air contaminants from A & B BLEACH PLANT STACKS identified as 21 and 16 respectively, and the CHEMICAL PLANT STACK identified as 16a as shown on the attached Site Plan A/B.

The site reference number for this discharge is E212146.

1.7.1 The maximum authorized combined rate of discharge from **A & B BLEACH PLANT STACKS** is 3500 m³/min. The maximum authorized rate of discharge from the **CHEMICAL PLANT STACK** is 100 m³/min. The authorized discharge period for these stacks is continuous.

The characteristics of each of the discharges from **A & B BLEACH PLANT STACKS** must not exceed daily average concentrations of 10 ppm ClO₂.

- **1.7.2** The authorized works are a chiller A & B Bleach Plant stacks, scrubber for chemical plant stacks, fans and related appurtenances approximately located as shown on the attached Site Plan A/B.
- **1.7.3** The authorized works must be installed and operating during discharge.
- **1.7.4** The location of the facilities from which the discharge originates and the location of the point of discharge is the same location as set out in Subsection 1.1.5.

2. GENERAL REQUIREMENTS

2.1 BYPASSES

Any bypass of the authorized works is prohibited unless the approval of the Director is obtained and confirmed in writing.

2.2 PROCESS MODIFICATIONS

The Permittee must notify the Director prior to implementing changes to any process that may adversely affect the quality and/or quantity of the discharge. Despite notification under this section, permitted levels must not be exceeded.

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2.3 MAINTENANCE OF WORKS AND EMERGENCY PROCEDURES

- **2.3.1** The Permittee must 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 effective operation of the authorized works or leads to unauthorized discharge, the Permittee must comply with all applicable statutory requirements, immediately notify the Regional Manager, Environmental Protection, and take appropriate remedial action for the prevention or mitigation of pollution. All Statutory requirements will remain in effect and the Director may reduce or suspend operations to protect the environment until the authorized works have been restored and/or corrective steps have been taken to prevent unauthorized discharges.
- **2.3.2** During and/or after the emergency event or condition, the Permittee must conduct sampling and analysis of discharges which might be non-compliant with this permit and/or applicable statutory requirements, and as they become available, provide the results to the Regional Manager, Environmental Protection, or designated Officer.
- **2.3.3** Within 30 days of the emergency event or condition, provide a report including results of sampling and analysis, non-compliance with this permit and/or applicable statutory requirements, corrections to the operational system, root cause of the emergency event or condition, and decisions for corrective and preventive action.

2.4 STANDARD CONDITIONS

For the administration of this permit all gaseous volumes must be converted to standard conditions of 293.15 °K and 101.325 kPa with zero percent moisture (unless otherwise specified).

2.5 SULPHUR CONTENT OF FUEL

The Permittee is required to comply with the Sulphur Content of Fuel Regulation. In a manner satisfactory to the Director, the Permittee must determine the sulphur content of each shipment of fuel received.

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2.6 Upgrading of Works

The Director may require repair, alteration, removal, improvement or addition to works or construction of new or existing works, and submission of plans and specification for works specified in this permit.

2.7 NITROGEN OXIDES

The Director may require installing additional works or taking measures to control the discharge of nitrogen oxides from the recovery boilers, power boilers and lime kilns.

2.8 #4 POWER BOILER SALT ALLOWANCE

The Director may give an allowance for uncollected salt particles in the Total Particulate Matter discharged from #4 Power Boiler as specified in Subsection 1.3.2.

2.9 IMPACT ASSESSMENT

The Director may require studies to be conducted and to report information specified by the Director. Based on results of inspection and/or any other information available to the Director on the effect of the discharge on the receiving environment, changes may be required to reduce the emissions from the authorized sources, undertake additional monitoring, install additional authorized works or change the method of operation.

2.10 TRANSFER OF AUTHORIZATION

A transfer of a Permit or Approval is without effect unless the Director has consented in writing to the transfer.

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3. MONITORING AND REPORTING REQUIREMENTS

3.1 DISCHARGE OF AIR CONTAMINANTS FROM MILL PROCESS

Source of Discharge	Parameter	Sampling/Analysis Frequency
#3 & #4 Recovery Boilers (Subsections 1.1 & 1.2)	Total Particulate Matter	Quarterly.
	Total Reduced Sulphur (TRS) as H ₂ S	Continuously - See note 7.
	Nitrogen Oxides (NO _x)	See note 1.
	Sulphur Dioxide (SO ₂)	Continuously - See note 7.
#4 Power Boiler (Subsection 1.3)	Total Particulate Matter	Quarterly - See note 2.
	Opacity (correlated to stack test information)	Continuously - See note 7.
	Nitrogen Oxides (NO _x)	See note 1.
	Sulphur Dioxide (SO ₂)	Quarterly - See note 3.
	PCDD & PCDF	Annually - See notes 5 & 6.
#5 Power Boiler (Subsection 1.4)	Nitrogen Oxides (NO _X)	See note 1.
	Sulphur Dioxide (SO ₂)	See note 3.
#1 & #2 Lime Kilns (Subsection 1.5)	Total Particulate Matter	Quarterly.
	Total Reduced Sulphur (TRS) as H ₂ S	Quarterly - See note 4.
	Sulphur Dioxide (SO ₂)	Quarterly - See note 3.
	Nitrogen Oxides (NO _x)	See note 1.
#3 & #4 Recovery Boiler Smelt	Total Particulate Matter	Quarterly.
Dissolving Tanks	Total Reduced Sulphur (TRS) as	Quarterly - See note 4.
(Subsection 1.5)	H ₂ S	
A-Brown Stock Washer Hood (Subsection 1.5)	Total Reduced Sulphur (TRS) as H ₂ S	Quarterly - See note 4.
B/K-Brown Stock Washer Hoods	Total Reduced Sulphur (TRS) as H ₂ S	Quarterly - See note 4.
(Subsection 1.5)	2	
A-Foam Tank & Seal Tanks	Total Reduced Sulphur (TRS) as	Quarterly - Sec note 4
Vent	H ₂ S	
(Subsection 1 .5)	T (1D 1 10 11 (TDC)	
B-Seal Tank Vent (Subsection 1.5)	Total Reduced Sulphur (TRS) as H ₂ S	Quarterly - See note 4.
A & B-Bleach Plant Stacks	Chlorina Diovida (CIO.)	Continuously See note 7
(Subsection 1.7)	Chlorine Dioxide (ClO ₂)	Continuously - See note 7.

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Note 1.	The Director may specify a monitoring program (consisting of periodic or continuous sampling) for NO _x . The results of continuous sampling must be averaged over a period approved by the Director.
Note 2.	In addition to determining the total particulate concentration in mg/m ³ , the particulate collected must be analyzed for chlorides and the results reported in terms of sodium chloride.
Note 3.	If fuel oil is used in any quarter, the sulphur content of each delivery must be determined and records maintained for inspection.
Note 4.	The method for calculating the TRS discharge in terms of kg/ADUt must be acceptable to the Director.
Note 5.	Testing for PCDD (polychlorinated dibenzo-p-dioxins) & PCDF (polychlorinated dibenzofurans) must follow the frequency and procedures specified under the Canada-Wide Standards for Dioxins and Furans.
Note 6.	PCDD & PCDF must be expressed in dioxin toxicity equivalent value (dioxin TEQ) as defined in the <i>Hazardous Waste Regulation</i> .
Note 7.	Maintain records for inspection and report daily average continuous monitor readings.

3.2 OPERATING CONDITIONS

For the purpose of validating the sampling and monitoring data, sampling must be done under actual operating conditions when, in the opinion of the Director, the Permittee is able to document that these conditions represent an operational level equal to or greater than the 90th percentile for the 90 days, or other period approved by the Director, prior to the sampling date.

The Permittee must schedule and carry out quarterly sampling of #4 Power Boiler stack only during periods within each quarter when the boiler is fired with wood.

The 90th percentile operational requirement does not apply to the sampling for TRS, PCDD and PCDF - see notes 4, 5, and 6, Subsection 3.1.

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The following parameters are considered in determining actual operating conditions:

- Production Rate unbleached Kraft pulp ADUt/day
- #3 & #4 Recovery Boilers black liquor solids fired tonnes/day
- # 4 Power boiler
 - o Wood derived steam production tonnes/hour
 - o Total steam production tonnes/hour
- #1 & #2 Lime Kilns bone dry lime mud fired tonnes/day.

3.3 RECORD OF FUEL—#4 POWER BOILER

For #4 Power Boiler, the Permittee must determine and record, in a manner satisfactory to the Director, the individual rates of clean wood and effluent treatment plant sludge, asfired into the boiler during each quarterly stack sampling event.

3.4 VENTING OF CNCG AND DNCG

The Permittee must record the duration and frequency of discharges from the TRS emergency stack as authorized in Subsection 1.5. Based on the monitoring results and/or other pertinent information, the Director may change conditions for the discharge of air contaminants from these sources.

3.5 AMBIENT AIR

The Permittee must suppress fugitive dust created within the operation area, and carry out an ambient air quality monitoring program, as approved by the Director, such that at points designated by the Director:

- The suspended particulate matter with an effective diameter of 2.5 μm or less (PM_{2.5}) is measured, and the results recorded as micrograms per cubic metre averaged over one hour periods.
- Total reduced sulphur (TRS) as H₂S is continuously measured and the results recorded in parts per billion (volume) averaged over one hour periods.
- Oxides of sulphur (SO_x) and oxides of nitrogen (NO_x) are continuously measured and the results recorded in parts per billion (volume) over one hour periods.
- A meteorological station capable of measuring wind speed, direction and temperature is operating.

The sampling of parameters, frequency and locations may be adjusted from time-to-time as directed by the Director. Based on the results of monitoring the Permittee may be required to implement additional works.

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3.6 TANK, STEAM AND BUILDING VENTILATION-TYPE DISCHARGES

Based on monitoring results, upgrading may be required and/or the permit amended to specify discharge limits.

3.7 SAMPLING AND ANALYTICAL PROCEDURES

Sampling must be carried out in accordance with the procedures described in the most recent edition of the "British Columbia Field Sampling Manual for Continuous Monitoring and the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples" or by suitable alternative procedures as authorized by the Director.

Analyses are to be carried out in accordance with procedures described in the most recent edition of "British Columbia Environmental Laboratory Methods Manual" or by suitable alternative procedures as authorized by the Director.

Copies of the above manuals may be purchased from Queen's Printer Publications Centre, P. 0. Box 9452, Stn. Prov. Gov't. Victoria, British Columbia, V8W 9V7 (1-800-663-6105 or (250) 387-6409). The manuals are also available at www.env.gov.bc.ca/epd/wamr/labsys/lab_meth_manual.html. and at all Environmental Protection offices.

3.8 SAMPLING LOCATION AND TECHNIQUES

All sampling locations, techniques, and equipment require the consent of the Director prior to use. Sampling and monitoring data, which also should include rate of discharge measurements, must be accompanied by process data relevant to the operation of the source of the emissions and to the performance of the pollution abatement equipment involved in the testing.

3.9 SOURCE TESTING FACILITIES

The Permittee must provide and maintain suitable support facilities to enable ministry personnel to monitor emissions from sources specified by the Director.

3.10 QUALITY ASSURANCE

All data of analyses required to be submitted by the Permittee must be conducted by a laboratory acceptable to the Director. At the request of the Director, the Permittee must provide the laboratory quality assurance data, associated field blanks and duplicate analysis results along with the submission of data required under Subsection 3.1 of the permit.

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3.11 REPORTING

The Permittee must submit reports in a form and manner satisfactory to the Director including:

- Information required by Subsections 2.1, 2.2 and 2.3 as and when necessary.
- Once each calendar quarter year within 30 days of each quarter:
 - The results of the monitoring requirements specified in Subsections 3.1, 3.2, 3.3, 3.4 and 3.5.
 - o All occurrences of non-compliance with the requirements of this permit and/or applicable statutory requirements, all relevant results of sampling and analysis, explanation of the most probable cause(s) of the occurrences, and corresponding corrective and preventive actions taken and/or planned.
- Within 5 (five) business days of the day of occurrence, an explanation of the most probable cause(s) of any failure of continuous discharge or ambient monitoring instrument or failing a Ministry or internal performance audit. The explanation must include the corresponding corrective and preventive actions taken and/or scheduled.
- Annually, on or before March 1, a compilation and interpretation of all occurrences of non-compliance with this permit and/or applicable statutory requirements, and continuous monitor failures of the previous calendar year, with an evaluation of the effectiveness of corrective and preventive actions taken.
- Annually, on or before June 30, a comprehensive review and analysis of the ambient air monitoring data obtained during the previous calendar year, including but not limited to trend analysis, conclusions and recommendations.

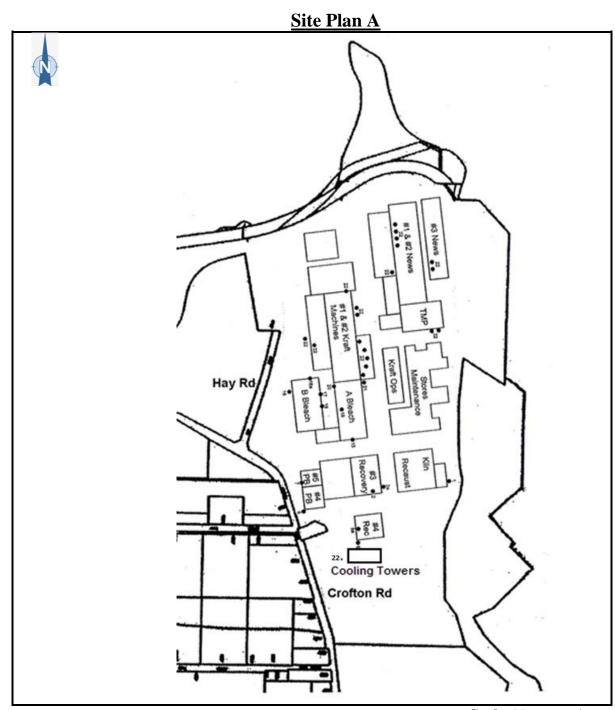
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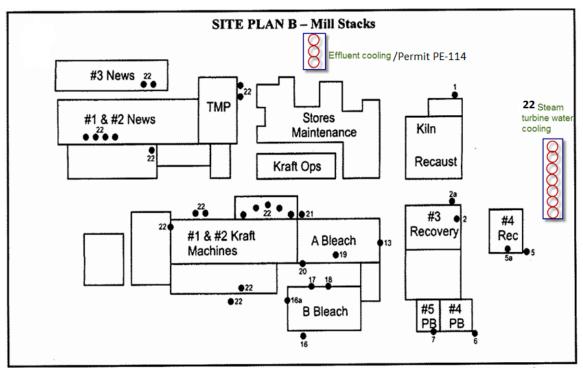
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Stack/	Description	Site
Vent	_	Reference
1	KILN—COMBINED	E217132
2	#3 RECOVERY BOILER	E100154
2a	#3 RECOVERY DISSOLVING STACK	0160019
5	#4 RECOVERY BOILER	E217130
5a	#4 RECOVERY DISSOLVING STACK	E217131
6	#4 Power Boiler	E100161
7	#5 Power Boiler	E212135
13	TRS EMERGENCY STACK	E266442
16	B BLEACH PLANT STACK	E212146
16a	CHEMICAL PLANT STACK	E212146
17	B SEAL TANK VENT	E265862
18	B/K Brown Stock Washer Hoods - combined	E212143
19	A Brown Stock Washer Hoods	E212142
20	A FOAM TANK VENT & SEAL TANK VENT	E266443
21	A BLEACH PLANT STACK	E212146
22	KRAFT PULP MACHINES, THERMOMECHANICAL PULP (TMP)	E212149
	MACHINES, NEWSPRINT MACHINES, MAINTENANCE SHOPS,	
	LABORATORY VENTILATION, FUME HOODS, STORAGE TANK	
	VENTS, AND CONDENSING STEAM-TURBINE CLOSED-LOOP	
	COOLING TOWERS	
	ALL MISCELLANEOUS TRS SOURCES	E100156

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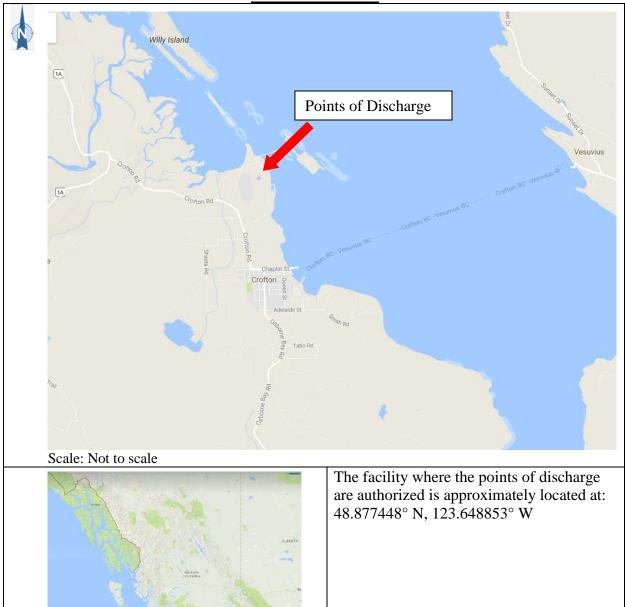
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LOCATION MAP



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