



August 25, 2017

Tracking Number: 345251
Authorization Number: 153

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 153 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.

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.

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-discharge-authorization/data-and-report-submissions>

Additional requirements may also be specified by regulations under the *Environmental Management Act* including, but not limited to, Pulp Mill and Pulp and Paper Mill Liquid

Ministry of Environment and Climate Change Strategy	Environmental Protection Division	2080-A Labieux Road Nanaimo BC V9T 6J9	Authorizations – South Region Telephone: (250) 751-3100 Facsimile: (250) 751-3103
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Effluent Control Regulation, Hazardous Waste Regulation, Spill Reporting Regulation, Contaminated Sites Regulation, Public Notification Regulation, and Environmental Data Quality Assurance Regulation.

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.

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

Phil Lum, Catalyst Paper, General Partnership, 5775 Ash Avenue, Powell River, BC
V8A 4R3



MINISTRY OF ENVIRONMENT

PERMIT

153

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 effluent to Malaspina Strait and Powell River from a pulp and paper mill located at 5775 Ash Avenue, Powell River, 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 153 issued under Part 2, Section 14 of the Environmental Management Act.

1. AUTHORIZED DISCHARGES

1.1. This section applies to the discharge of effluent from a PROCESS EFFLUENT SECONDARY TREATMENT PLANT to Malaspina Strait (Outfall #1). The site reference number for this discharge is E208487.

1.1.1. The maximum authorized rate of discharge is 245 000 cubic metres per day. This limit includes the discharge authorized in Section 1.5.

1.1.2. The authorized discharge period is continuous.

1.1.3. The characteristics of the discharge must be equivalent to or better than:

Total Suspended Solids (TSS)
Daily maximum (24-hour composite): 145 mg/L;
Monthly average (24-hour composite): 81 mg/L;

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(most recent)

[Signature]
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for Director, Environmental Management Act
Lower Mainland Region

Biochemical Oxygen Demand (BOD ₅)	
Daily maximum (24-hour composite):	29 mg/L;
Monthly average (24-hour composite):	29 mg/L;
Temperature	Maximum: 40° C;
Rainbow trout 96hrLC50	Minimum: 100% (V/V)*;
pH	Maximum: 8 pH units;
	Minimum: 5.5 pH units;
Dissolved Oxygen	Minimum: 2 mg/L.

* A minimum 96hrLC50 of 100% (V/V) means that in a static bioassay on Rainbow trout, there must be no more than 50% mortality over 96 hours in undiluted effluent.

1.1.4. The authorized works are fibre recovery facilities, spill control system, primary clarifier, oxygen activated sludge secondary treatment system, two secondary clarifiers, two foam towers, submerged diffuser outfall extending a minimum of 820 metres from shore to a minimum depth of 45 metres at low water, any other works required to meet the effluent characteristics specified in Section 1.1.3 above and related appurtenances approximately located as shown on Site Plan A.

1.1.5. The location of the facilities from which the discharge originates is L3088 (PID 015-890-333), L7212 (PID 004-781-821), L7213 (PID 004-781-856), L6071, Water L 6174, L6237A, L5922, L5923, L5924, L4071, L4072, L3437 (PID 015-875-121), L3090 (PID 015-890-325), L3091 (PID 015-890-317), Lot A2, Ref. Plan 490, DL 3091 (PID 015-890-309), Part of Block 43 (PID 002-554-682), Block 44 (PID 010-264-469), and Block 46 (PID 002-560-194) of DL 450, Plan 8096, New Westminster District.

The location of the point of discharge is Malaspina Strait, near or adjacent to DL450, Plan 8096, New Westminster District.

1.2. This section applies to the discharge of **COOLING WATER and STORM WATER** to Malaspina Strait (Outfall #2). The site reference number for this discharge is E208497.

1.2.1 The maximum authorized rate of discharge is 74 000 cubic metres per day.

1.2.2 The authorized discharge period is continuous.

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1.2.3 The characteristics of the discharge must be equivalent to or better than:

Temperature	Maximum:	35° C;
pH	Maximum:	8.5 pH units;
	Minimum:	5.5 pH units;
Rainbow trout 96hrLC20	Minimum:	100% (V/V)*.

* A minimum 96hrLC20 of 100% (V/V) means that in a static bioassay on Rainbow trout, there must be no more than 20% mortality over 96 hours in undiluted effluent.

1.2.4 The authorized works are an outfall and related appurtenances approximately located as shown on Site Plan A.

1.2.5 The location of the facilities from which the discharge originates is L3088 (PID 015-890-333), L7212 (PID 004-781-821), L7213 (PID 004-781-856), L6071, Water L 6174, L6237A, L5922, L5923, L5924, L4071, L4072, L3437 (PID 015-875-121), L3090 (PID 015-890-325), L3091 (PID 015-890-317), Lot A2, Ref. Plan 490, DL 3091 (PID 015-890-309), Part of Block 43 (PID 002-554-682), Block 44 (PID 010-264-469), and Block 46 (PID 002-560-194) of DL 450, Plan 8096, New Westminster District, within the mill site and parts of Blocks 8, 9, 10, 13, 14, 15 and 18, District Lot 450, New Westminster District, within the residential area of Townsite, Powell River.

The location of the point of discharge is Malaspina Strait, near or adjacent to DL450, Plan 8096, New Westminster District.

1.3. This section applies to the discharge of COOLING WATER and STORM WATER to Powell River (Outfall # 3). The site reference number for this discharge is E208500.

1.3.1 The maximum authorized rate of discharge is 81 400 cubic metres per day.

1.3.2 The authorized discharge period is continuous.

1.3.3 The characteristics of the discharge must be equivalent to or better than:

Temperature	Maximum:	35° C;
Rainbow trout 96hrLC20	Minimum:	100% (V/V)*.

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* A minimum 96hrLC20 of 100% (V/V) means that in a static bioassay on Rainbow trout, there must be no more than 20% mortality over 96 hours in undiluted effluent.

- 1.3.4 The authorized works are an outfall and related appurtenances approximately located as shown on Site Plan A.
- 1.3.5 The location of the facilities from which the discharge originates is the same as 1.1 above.
- 1.3.6 The location of the point of discharge is Powell River, adjacent to DL 450, Plan 8096, New Westminster District.

1.4. This section applies to the discharge of COOLING WATER and STORM WATER to Malaspina Strait (Outfall #4). The site reference number for this discharge is E221871.

- 1.4.1. The maximum authorized rate of discharge is 94 700 cubic metres per day. This limit includes the discharge authorized in Section 1.5.
- 1.4.2. The authorized discharge period is continuous.
- 1.4.3. The characteristics of the discharge must be equivalent to or better than:

pH	Maximum:	8.5 pH units;
	Minimum:	5.5 pH units;
Temperature	Maximum:	40° C;
Rainbow trout 96hrLC20	Minimum:	100% (V/V)*.

* A minimum 96hrLC20 of 100% (V/V) means that in a static bioassay on Rainbow trout, there must be no more than 20% mortality over 96 hours in undiluted effluent.

- 1.4.4. The authorized works are a submerged outfall and related appurtenances approximately located as shown on Site Plan A.
- 1.4.5. The location of the facilities from which the discharge originates and the point of discharge is the same as Section 1.1 above.

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1.5. This section applies to the discharge of **NON- CONTACT COOLING WATER FROM THE SURFACE CONDENSER 731-756 (Outfall #5)** to Malaspina Strait through either Outfall #1 diffuser or Outfall #4. The site reference number for this discharge is E285109.

1.5.1. A maximum authorized limit for the rate of discharge is undetermined.

1.5.2. The authorized discharge period is continuous.

1.5.3. The characteristics of the discharge must be equivalent to or better than:

1.5.3.1. the discharge characteristics specified in section 1.1.3,
if discharging through Outfall #1 diffuser, or

1.5.3.2. the discharge characteristics specified in section 1.4.3,
if discharging through Outfall #4.

1.5.4. The authorized works are a submerged diffuser outfall extending a minimum of 820 metres from shore to a minimum depth of 45 metres at low water (also authorized in section 1.1.4) or, subject to section 1.5.5, a submerged outfall (also authorized in section 1.4.4) and related appurtenances approximately located as shown on Site Plan A.

1.5.5. Only when the discharge rate at the diffuser outfall #1 is approaching its authorized limit or under special circumstances, non-contact cooling water from the surface condenser (731-756) may be discharged through Outfall #4. Special circumstances must be documented, pursuant to Section 3.1.7.

1.5.6. The location of the facilities from which the discharge originates and the point of discharge is the same as Section 1.1.5 above.

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2. GENERAL REQUIREMENTS

2.1 BYPASSES

The discharge of contaminants which have bypassed the authorized treatment works is prohibited unless the prior approval of the Director is obtained and confirmed in writing.

2.2 NOTIFICATION

The Regional Manager, Environmental Protection, must be notified of a change in ownership of the works within 10 days of an ownership change.

2.3 ALLOWABLE EFFLUENT CONCENTRATIONS

The allowable maximum concentrations (mg/L) of TSS and BOD₅ for the discharge described in Section 1.1 above are based on the 90th percentile production and flow rates for the calendar year 2014 selected based on the reported information for the immediate consecutive previous years 2014, 2015, 2016.

The 90th percentile rates are the total production rate (PROD) of 1 380 ADt/d, and an effluent discharge rate (EFF) of 98 800 m³/day. At allowable levels of 10.4 kg/ADt for daily maximum TSS, 5.8 kg/ADt for monthly average TSS and 2.09 kg/ADt for daily maximum and monthly average BOD₅, the maximum allowable effluent concentrations have been calculated as follows:

TSS

(daily maximum) = $10.4 \text{ kg/ADt} \times (1\,380 \text{ ADt/d} \div 98\,800 \text{ m}^3/\text{d}) \times 1\,000 = 145 \text{ mg/L}$;
(monthly average) = $5.8 \text{ kg/ADt} \times (1\,380 \text{ ADt/d} \div 98\,800 \text{ m}^3/\text{d}) \times 1\,000 = 81 \text{ mg/L}$;

(daily loading maximum) = $10.4 \text{ kg/ADt} \times \text{DPROD}^* \text{ ADt/d} = 15\,600 \text{ kg/d}$;
(monthly loading average) = $5.8 \text{ kg/ADt} \times \text{DPROD}^* \text{ ADt/d} = 8\,700 \text{ kg/d}$

BOD₅

(daily maximum) = $2.09 \text{ kg/ADt} \times (1\,380 \text{ ADt/d} \div 98\,800 \text{ m}^3/\text{d}) \times 1\,000 = 29 \text{ mg/L}$;
(monthly average) = $2.09 \text{ kg/ADt} \times (1\,380 \text{ ADt/d} \div 98\,800 \text{ m}^3/\text{d}) \times 1\,000 = 29 \text{ mg/L}$;

(daily loading maximum) = $2.09 \text{ kg/ADt} \times \text{DPROD}^* \text{ ADt/d} = 3\,135 \text{ kg/d}$;
(monthly loading average) = $2.09 \text{ kg/ADt} \times \text{DPROD}^* \text{ ADt/d} = 3\,135 \text{ kg/d}$

* DPROD represents an estimated 90th percentile level of production design rates at the date of this permit.

The Director may amend the allowable concentrations in the effluent based on 90th percentile production and flow rates as submitted annually or based on other information obtained.

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2.4 MAINTENANCE OF WORKS AND EMERGENCY PROCEDURES

2.4.1 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 Director, in a form and manner acceptable to the Director, 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 taken to prevent unauthorized discharges.

2.4.3 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 Director.

2.4.3 Within 30 days of the emergency event or condition, the permittee must 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 schedule for corrective and preventive action.

2.5 FOAM

Should foam, attributable to the effluent, become objectionable in receiving waters, the Director may require additional treatment to remove the foam or eliminate the cause of the foam.

2.6 STORM WATER

The characteristics of all storm water discharges which are not listed in this permit must be uncontaminated water.

2.7 PROCESS MODIFICATIONS

The Director must be notified 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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2.8 POSTING OF OUTFALL

A sign must be erected along the alignment of the outfall above high water mark. The sign must identify the nature of the works. The wording and size of the sign must be acceptable to the Director.

2.9 SLUDGE WASTING AND DISPOSAL

Sludge wasted from the treatment plant must be disposed of to a site and in a manner approved by the Director, or as authorized by regulation under the Environmental Management Act.

2.10 COLOUR

Should colour, attributable to the effluent, become objectionable in receiving waters, the Director may require additional treatment to remove the colour forming constituents from the effluent prior to discharge.

2.11 NUTRIENTS

Should nutrients be added to increase the efficiency of any biological treatment system, the quantity of nutrient must be so controlled that excess nutrients are not discharged to the receiving waters. The ratio of BOD₅:N:P must be recorded and data kept available for inspection.

2.12 EMERGENCY RESPONSE PLAN

The permittee must prepare and maintain an Emergency Response Plan that describes the procedures to be taken to prevent or mitigate any deposit of deleterious substance out of the normal course of events including loss of electric power. The Emergency Response Plan must be immediately implemented if there is a deposit, or any risk of a deposit, of a deleterious substance out of the normal course of events. In addition, an updated emergency response plan, including a report on any emergency responses, taken in the previous year, must be kept available, on site for inspection. The permittee must also prepare, update annually and keep available for inspection, a remedial plan describing procedures to be taken by the permittee to eliminate all unauthorized deposits of deleterious substances if the effluent fails an acute lethality test using rainbow trout.

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2.13 COMPLIANCE WITH FEDERAL PULP AND PAPER REGULATIONS

Notwithstanding the requirements in this permit, the permittee is required to adhere to all applicable legislation including the federal *Pulp and Paper Effluent Regulations (SOR/92-269 as amended by SOR/96-293 and SOR/99-166 and as amended from time to time)*. Where there are differences between federal and provincial requirements, the more stringent requirements will apply.

2.14 FUTURE 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 by qualified professionals for works specified in this authorization.

2.15 FUTURE FINANCIAL SECURITY

Although financial security is not required at this time, the Director may require security in the amount and form subject to the conditions the Director specifies.

2.16 TRANSFER OF AUTHORIZATION

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

3. MONITORING AND REPORTING REQUIREMENTS

3.1 DISCHARGE MONITORING

3.1.1 Grab and Composite Sampling

The permittee must maintain suitable sampling facilities and obtain grab and composite samples of the effluent as specified below. Composite samples must be taken using a method acceptable to the Director. Proper care should be taken in sampling, storing and transporting the samples to adequately control temperature and avoid contamination, breakage, etc.

The locations of the sampling sites must be the effluent discharges described in Sections 1.1, 1.2, 1.3, 1.4 and 1.5.

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3.1.2 Analysis

Obtain analyses of the samples as follows:

<u>Parameter</u> (Unless otherwise specified, the units are mg/L)	<u>Effluent Sampling Sites, Types and Normal Monitoring Frequencies</u>				
	1.1	1.2	1.3	1.4	1.5
pH (pH units)	CONT	CONT	---	CONT	CONT
Temperature (°C)	CONT	CONT	CONT	CONT	CONT
Conductivity (µS/cm)	CONT	CONT	---	CONT	CONT
Dissolved Oxygen	G(3/W)	---	---	---	G(3/W)
Toxicity (% V/V)					
(Rainbow trout 96hrLC50)	G(M)	---	---	---	G(M)
(Rainbow trout 96hrLC20)	---	G(M)	G(M)	G(M)	---
(Daphnia magna 48hrLC50)	G(W)	G(W)	G(W)	G(W)	G(W)
TSS	C(D)	C(D)	C(D)	C(D)	C(D)
BOD ₅	C(3/W)	C(3/W)	C(3/W)	C(3/W)	C(3/W)
Oil and Grease	---	C(Q)	C(Q)	C(Q)	C(Q)
Residual chlorine	---	G(M)	---	G(M)	---
Ammonia nitrogen	C(W)	---	---	---	---
Resin Acids	C(Q)	---	---	---	---

<u>Parameter</u> Unless otherwise specified, the units are mg/L.	<u>Reduced Monitoring Frequency*</u> Sites 1.2, 1.3, 1.4 and 1.5
Toxicity (% V/V) (Daphnia magna 48hrLC50)	G(M)
TSS	G(M)
BOD ₅	G(M)
Dissolved Oxygen	G(W)

CONT = continuous monitoring

G = grab sample

C = 24-hour composite sample (as described in B.C. Reg. 470/90)

D = once per day when an effluent is being discharged

W = once per week

3/W = three times per week

M = once per calendar month

Q = once per calendar quarter

* **Reduced Monitoring Frequency** of BOD₅, TSS, Dissolved Oxygen and Daphnia Magna toxicity testing, for Sites 1.2, 1.3, 1.4 and 1.5 may be conducted if, for each sample of effluent from the site (tested during the preceding calendar month), the TSS and BOD₅ levels were both less than

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10 mg/L, the effluent was not acutely lethal to Rainbow trout (no more than 50% mortality in 100% effluent solution), and the effluent contained no other deleterious material. If any subsequent sample does not meet the above effluent quality requirements, **Normal Monitoring Frequencies** must be conducted for all parameters until one calendar month has passed where the discharge has met the above conditions. At that point, the Reduced Monitoring Frequency may be resumed.

3.1.3 Toxicity

For the discharges described in Sections 1.1, 1.2, 1.3, 1.4 and 1.5 above, rainbow trout toxicity testing must be increased from once per month to once per week if a sample of effluent fails the rainbow trout toxicity test. For the purpose of this section, a sample is considered to have failed if more than 50% of the test fish die in a 100% effluent solution within 96 hours. Samples must continue to be collected and tested on one day each week until they pass three consecutive tests, at which time testing can revert to once per month.

Daphnia magna toxicity testing must be conducted once per week as described above. However, if a sample of effluent fails the Daphnia magna toxicity test, a sample of effluent must be collected without delay and tested for 96hrLC50 using rainbow trout in accordance with accepted procedures. For the purpose of this section, a sample is considered to have failed if more than 50% of the test organisms die in a 100% effluent solution within 48 hours.

For 96hrLC50 and 96hrLC20 tests, the percent of fish mortality after 96 hours in the undiluted sample must also be recorded. For 48hrLC50 tests, the percent of Daphnia magna mortality after 48 hours in the undiluted sample must also be recorded

3.1.4 Continuous Monitoring

The minimum, maximum and average daily values must be recorded for pH. For temperature and conductivity, the daily maximum and average values must be recorded.

3.1.5 Loading Values

The monthly minimum, maximum and average values (mg/L) must be recorded for TSS and BOD₅. In addition, the actual kg/d and kg/ADt values must be recorded for TSS and BOD₅. The actual kg/d values are calculated by multiplying the actual contaminant concentration (mg/L) by the actual discharge flow (m³/d) and dividing by 1000. The kg/ADt values are calculated by dividing the actual kg/d values by the appropriate 90th percentile production rate.

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3.1.6 Flow Measurement

Provide and maintain suitable flow measuring devices, which are calibrated to be accurate to within 10 percent, and record once per day the effluent volume discharged over a 24-hour period via the outfalls specified in Sections 1.1, 1.2, 1.3, and 1.4.

Also, record once each day the volume of non-contact cooling water from the surface condenser (731-756) (Section 1.5) that is diverted to outfall #1.

3.1.7 Non-contact cooling water from the surface condenser (731-756)

A record must be kept documenting the days and the reasons that non-contact cooling water from the surface condenser (731-756) (Section 1.5) is discharged via outfall #4.

3.2 PRODUCTION FIGURES

Record once per day the total mill production (ADt/d). Once per month, determine the monthly average total mill production (ADt/d).

Once per year, determine the 90th percentile of total mill production based on daily productions recorded during the same calendar year period used to determine 90th percentile of effluent volumes. In addition, determine the highest 90th percentile of total mill production based on 90th percentile values calculated each year for the previous three calendar year periods.

3.3 ENVIRONMENTAL STUDY

The permittee must retain a qualified consultant to carry out a study, as required by Federal Regulation, on the environmental impact of the effluent discharges on Malaspina Strait. The study must be undertaken subject to consultation with the Regional Manager, Environmental Protection. It must include but not be limited to:

- (1) Results of monitoring requirements for effluent and receiving environment (water, sediment and biota) specified in Aquatic Environmental Effects Monitoring Requirements (EEM/1997/1 as amended from time to time) by Environment Canada and the Department of Fisheries and Oceans, and the associated Pulp and Paper Aquatic Environmental Effects Monitoring Requirements (Annex 1 to EEM/1997/1 as amended from time to time).
- (2) A comparison of results with previous data using graphs and tables and a discussion on whether the environmental impact is increasing or decreasing,
- (3) Any other monitoring that is required to assess the environmental impact.

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3.1 MONITORING PROCEDURES

3.4.1 Sampling Procedures

Sampling is to be carried out in accordance with the procedures described in the "British Columbia Field Sampling Manual for Continuous Monitoring and 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 Director.

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) or via the internet at www.crownpub.bc.ca. A copy of the manual is also available for review at all Environmental Protection offices.

3.4.2 Analytical Procedures

Analyses are to be carried out in accordance with procedures described in the "British Columbia Laboratory Manual (2009 Permittee Edition)", or the most recent edition, or by suitable alternative procedures as authorized by the Director.

A copy of the above manual may be purchased from the Queen's Printer Publication Centre, P. O. Box 9452, Stn. Prov. Govt. Victoria, British Columbia, V8W 9V7 (1-800-663-6105 or (250-387-6409)) or via the internet at www.crownpub.bc.ca. A copy of the manual is also available for review at all Environmental Protection offices.

3.4.3 Quality Assurance

All data of analyses required to be submitted by the permittee must be conducted by a laboratory acceptable to the Director.

If monitoring of permitted parameters is conducted in an on-site laboratory, the permittee must maintain a Quality Assurance protocol for each parameter. Any proposed changes to these protocols must be submitted to the Director for review prior to implementing the changes. A Quality Assurance protocol is to be submitted to the Director, a minimum of 30 days prior to starting to use an on-site laboratory for a new parameter.

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The Quality Assurance protocol must include but is not limited to the following:

1. The ratio of samples to blanks for each parameter and the acceptable blank values;
2. The ratio of samples to duplicates for each parameter and the acceptable relative percent difference between duplicates;
3. The ratio of samples to reference standards for each parameter and the acceptable percent recovery for reference standards; and
4. The corrective measures to be taken if duplicates, blanks or reference standards are outside acceptable ranges.

At the request of the Director, the permittee must submit all relevant quality assurance information from the on-site or contracted laboratory.

3.2 REPORTING

Maintain data of analyses, flow measurements, production figures, information pursuant to Section 3.1.7, and contaminant loadings (kg/d, kg/ADt, and statistics relating to monthly maximum, minimum and average reported values) for inspection and, in a form and manner acceptable to the Director, submit the data once per month, for the previous calendar month. The results of any additional TSS, BOD5 and toxicity testing conducted on the authorized discharges by the permittee must also be submitted.

Each data submission must include a statement outlining any reported value(s) that were outside the permit limits. Clearly identify the dates of these occurrences in the data submission, include an explanation as to the root cause of each occurrence and provide a description of the measures taken to rectify the situation. Should all submitted values be within the permit limits, a statement to that effect must be included.

All reports must be submitted before the end of the following calendar month.

The 90th percentile values for each calendar year must be submitted by January 31, the following year.

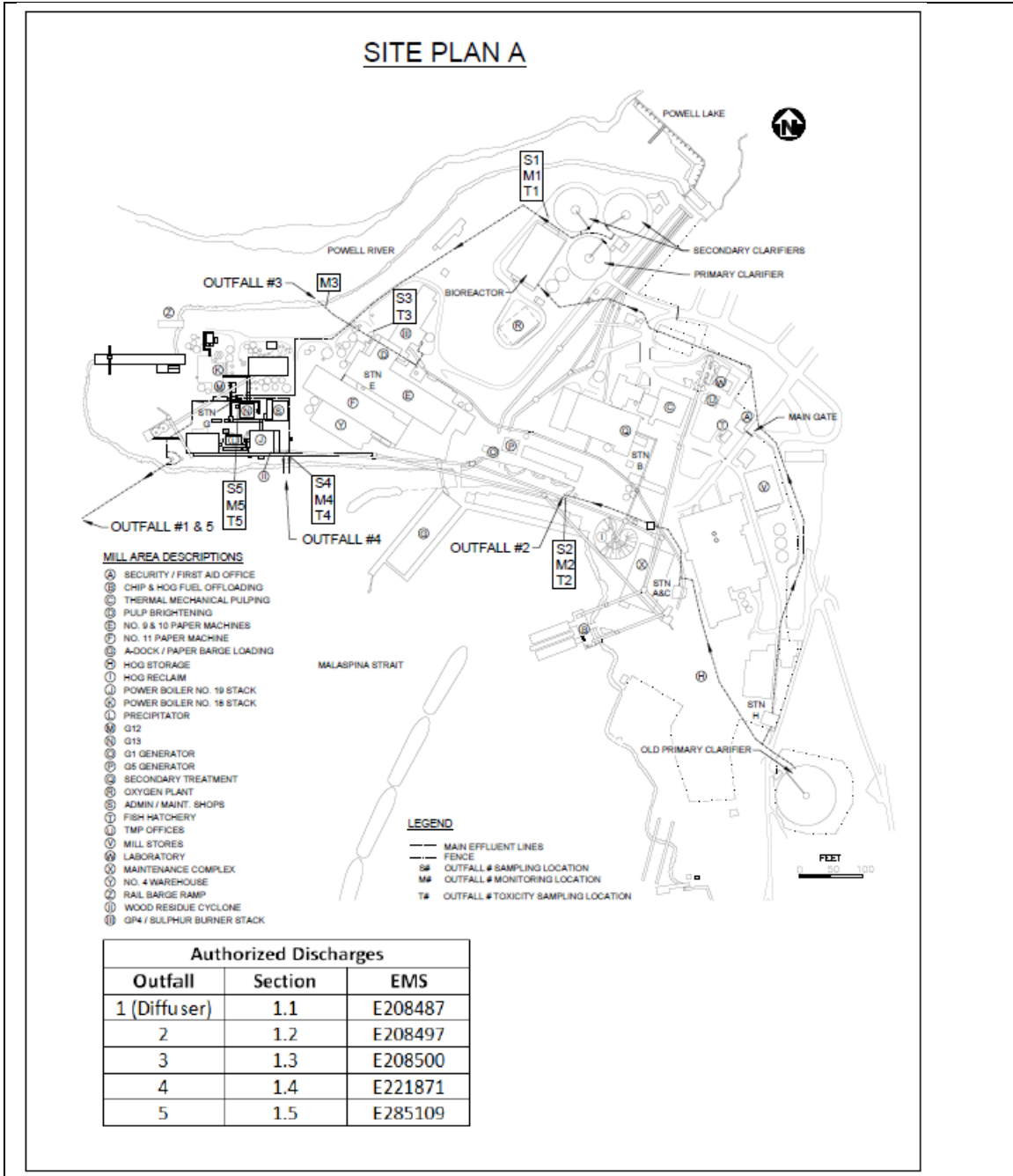
The permittee must report any deposits out of the normal course of events as required by federal regulation., in a form and manner acceptable to the Director,

The permittee must submit an effluent characterization and environmental study as required by federal regulation for the Environmental Effects Monitoring program.

Date issued: April 6, 1966
Date amended: August 25, 2017
(most recent)



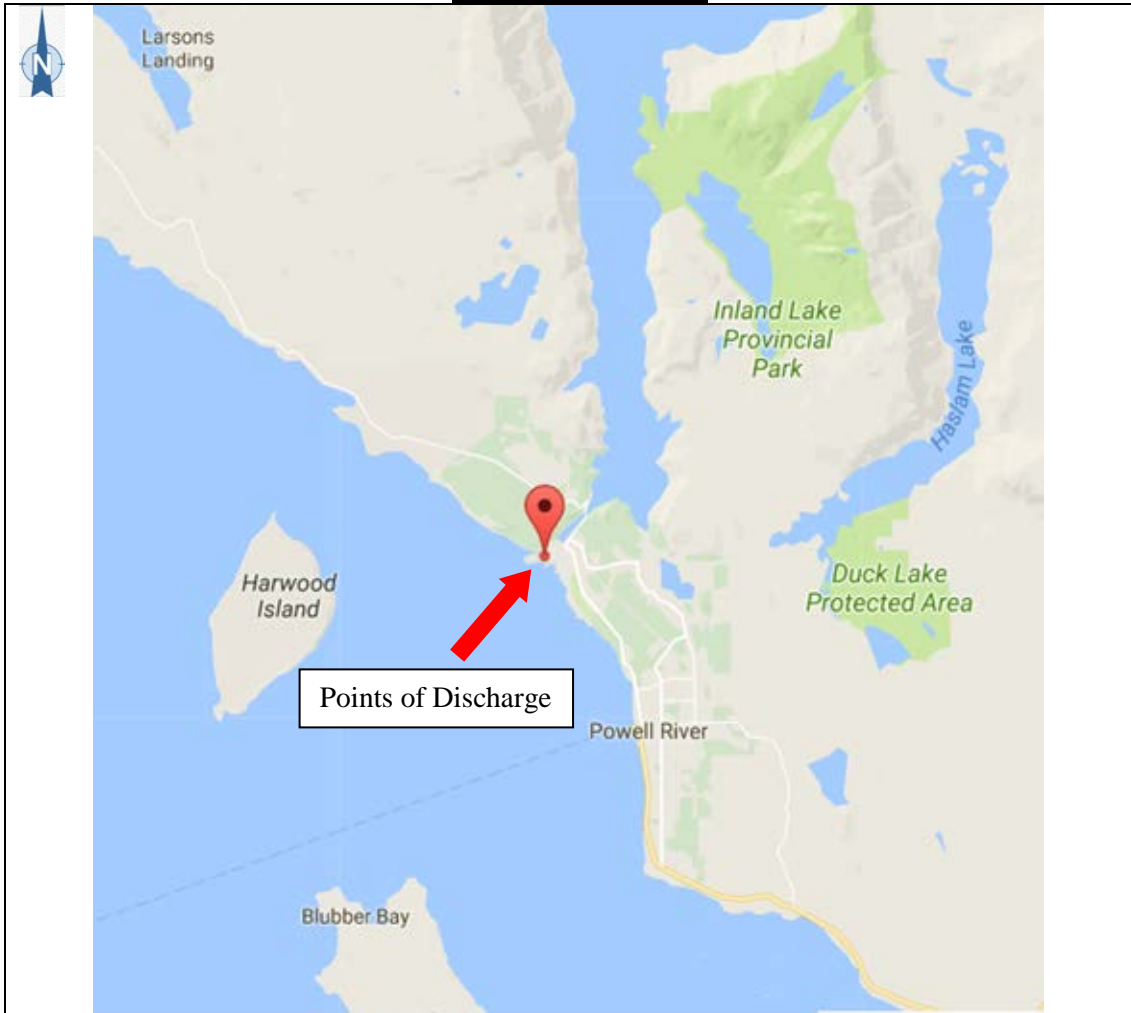
Bryan Vroom
for Director, *Environmental Management Act*
Lower Mainland Region



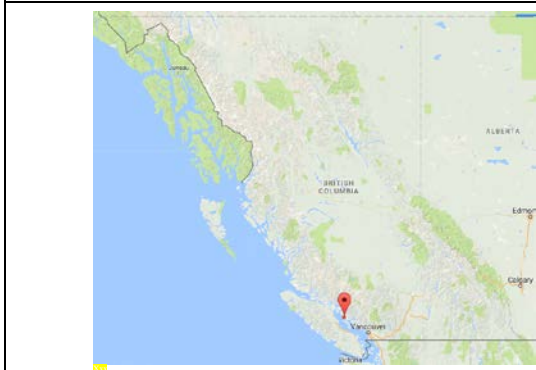
Date issued: April 6, 1966
 Date amended: August 25, 2017
 (most recent)

Bryan Vroom
 for Director, *Environmental Management Act*
 Lower Mainland Region

LOCATION MAP



Scale: Not to scale



The facility where the points of discharge are authorized is approximately located at: 49.875084° N, 124.556865° W

Date issued: April 6, 1966
Date amended: August 25, 2017
(most recent)



Bryan Vroom
for Director, *Environmental Management Act*
Lower Mainland Region