



February 26, 2016

File: 7001837

BC Hydro & Power Authority  
c/o Paula Pietramala  
D14-333 Dunsmuir Street  
Vancouver BC V6B 5R3

email: [paula.pietramala@bchydro.com](mailto:paula.pietramala@bchydro.com)

Dear Paula Pietramala:

**Re: Water Licence Application WLA0Z123498-0001**

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In response to adjudication of the above application, attached are Conditional Water Licence 132990 and plat, Conditional Water Licence 132991 and plat, Permit Over Crown Land No. 28283 and plat. Also attached are Attachment A: Scope of Independent Engineer, and Attachment B: Scope of Independent Environmental Monitor, to be signed with copies returned to this office at your earliest convenience.

Please read the documents carefully. Any error(s) in these documents should be brought to the attention of this office as soon as possible.

The dam authorized under this licence is subject to the Dam Safety Regulations of British Columbia. Additional information on design, construction and maintenance can be found in the *Canadian Dam Association Guidelines*.

A Permit over Crown Land (PCL) has been issued with these licences to provide authorization for the occupation of Crown land by flooding and the placement of works described by these water licences on Crown land. To the extent feasible, BC Hydro should secure tenure for those works on Crown land with a Registered Easement or Right-of-Way issued under the *Land Act* from the Ministry of Forests, Lands and Natural Resource Operations. The legal right to expropriate also exists in the *BC Hydro and Power Authority Act*.

BC Hydro is required to faithfully execute the commitments made in its letter of January 18, 2016, which confirms BC Hydro will not only comply with EAC Conditions 2, 3, 30, 47 and 56, but with respect to adversely affected water quantity or water quality being lawfully used from a surface or groundwater source,

“...BC Hydro will, as applicable, reimburse the owner for items such as:

1. Alterations to an existing water source or alternative water source  
e.g. filtration, pressure tank;

.../2



2. Investigations and assessments required to locate a new alternative water source if an existing water source no longer continues to function safely and reliably;
3. Drilling a new well or piping from another water source;
4. Legal and application costs associated with acquiring water rights; and
5. Short-term water supply where an alternative water source is not available e.g. trucking in water.”

The licensee is required to retain an Independent Engineer (the "IE") and Independent Environmental Monitor (the "IEM") over the duration of project construction. The IE will review project design drawings to confirm consistency with works authorized and that project design can meet all licence conditions. The IE makes recommendations to the Engineer under the *Water Act* (the "Engineer") to issue Leaves. The IE is also responsible to monitor the progress of project construction and report to the Engineer. The IEM is responsible for ensuring that all environmental impacts during construction are managed and mitigated to the extent feasible. The IEM reviews the Construction Environmental Management Plan ("CEMP"), including Environmental Protection Plans ("EPPs") and Environmental Works Plans ("EWPs"), and verifies that the plans adequately address the potential environmental impacts before construction work can proceed. The IEM will make recommendations to the Engineer on the adequacy of the CEMP and to the IE on the adequacy of the EPPs and EWPs before Leaves are granted.

Please note the following:

- 1) Water licences do not authorize entry on privately owned land for the construction of works, or flooding. Permission of the affected landowner must be obtained or an easement expropriated. For your protection, permission should be in writing and registered with the appropriate Land Title Office.
- 2) Permission for installing works on lands or roadways which are under the jurisdiction of any government agency, must be obtained from the agency concerned.

Please contact FrontCounter BC to assist you with notifications and any applications required if:

- a) there is any change in your mailing address;
- b) you sell the land to which the licence is appurtenant;
- c) you propose to subdivide the land to which the licence is appurtenant; or
- d) you propose to alter the works authorized under the licence.

In order for you to keep your water licence in good standing, the following must be observed:

- a) continued beneficial use of water, as authorized under your licence;
- b) payment of annual rentals;
- c) compliance with the terms of your licence; and
- d) compliance with the terms of the *Water Act*.

One of the obligations of a water licence is the payment of annual rentals and fees to the Crown for the authorization to exercise the rights granted under the licence. Failure to pay water rental invoices by a specified date may result in late-payment penalties, collection action or cancellation of the licence. Any questions in regards to invoices, statements or billing procedures should be directed to the Water Revenue Unit at 1 (800) 361-8866. Callers from the Victoria area should dial (250) 387-9445.

The *Water Act* gives the recipient of this notice the right to appeal my decision. Information on filing an appeal can be found on the Environmental Appeal Board Website at: <http://www.eab.gov.bc.ca/>. A right of appeal from my decision lies to the Environmental Appeal Board. Notice of any appeal must (1) be in writing; (2) include grounds for the appeal; (3) be directed by registered mail to the Chair, Environmental Appeal Board, PO Box 9425 Stn Prov Govt., V8W 9V1 or personally delivered to the office of the Board at 4th Floor, 747 Fort Street in Victoria, BC V8W 3E9; (4) be delivered within 30 days of receiving this letter, and (5) be accompanied by a fee of \$25.00, payable to the Minister of Finance.

If you have any questions or concerns, please contact this office.

Yours truly,

A handwritten signature in blue ink, appearing to read 'Pieter Bekker', with a stylized flourish at the end.

Pieter Bekker  
Deputy Comptroller of Water Rights

Enclosures



# Province of British Columbia

## *Water Act*

### CONDITIONAL WATER LICENCE

British Columbia Hydro and Power Authority is hereby authorized to divert and use water as follows:

- a) The stream on which the rights are granted is Peace River.
- b) The point of diversion on Peace River is denoted by PD36283 and is shown on the attached plan.
- c) The date from which this licence shall have precedence is January 11, 2008.
- d) The purpose for which this licence is issued is power and the category for the power is general. The power is to be generated at the Site C Generating Station.
- e) The maximum quantity of water which may be diverted and used under this licence is 2,700.00 cubic-meters-per-second (cms), subject to the following:  
The licensee shall maintain in Peace River, measured immediately downstream of the point of diversion:
  - 1) a minimum flow of 390.00 cms; or,
  - 2) a minimum flow as ordered by an Engineer under the *Water Act* (the "Engineer").
- f) The water may be diverted and used throughout the whole year.
- g) This licence is appurtenant to:
  - 1) the undertaking of British Columbia Hydro and Power Authority to construct and operate the Site C Clean Energy Project approved under Environmental Assessment Certificate E14-02, issued under the Environmental Assessment Act; and,
  - 2) the land upon which the powerhouse of the Site C Generating Station is to be located.
- h) The works authorized for the Site C Generating System are:
  - 1) an approach channel;
  - 2) an intake;
  - 3) a dam;
  - 4) spillways;
  - 5) a powerhouse and tailrace; and
  - 6) an access road,which shall be located approximately as shown on the attached plan; and
  - 7) ancillary works associated with operation of the dam and generating station.

- i) The dam authorized under clause (h) is subject to the Dam Safety Regulations and shall be designed, constructed and maintained, including any alterations, to the satisfaction of a Dam Safety Officer under the *Water Act* (the "Dam Safety Officer") and in accordance with the *Canadian Dam Association Guidelines*.
- j) Before commencing construction of the works authorized under clause (h) of this licence, the licensee must to the satisfaction of the Comptroller of Water Rights:
  - 1) retain a professional engineer registered in the province of British Columbia (the "Independent Engineer") who will provide services to the Engineer for the regulation of construction of the works (Attachment A);
  - 2) retain a person with professional qualifications (the "Independent Environmental Monitor") who will monitor environmental impacts from the construction of works (Attachment B);
  - 3) submit, the following:
    - a. plans that show the general arrangement of the works;
    - b. criteria for the design of the works;
    - c. criteria for the operation of the works;
    - d. a schedule for the construction of the works;
    - e. an environmental management plan (CEMP) for the management and mitigation of construction impacts;
  - 4) complete all monitoring, mitigation and compensation projects required for each Leave to Commence Construction, as specified in Schedule A; and
  - 5) obtain Leave to Commence Construction (LCC) in writing from the Engineer.
- k) Before undertaking construction of any component of works for which a LCC has been issued under (j) 5), the licensee must:
  - 1) ensure that the design drawings for the works to be constructed are signed and sealed by a professional engineer registered in the province of British Columbia (the "Design Engineer");
  - 2) ensure that a professional engineer registered in the province of British Columbia (the "Construction Engineer") supervises the construction of the works; and
  - 3) obtain a letter from the Independent Engineer that the actual construction of that component work may proceed.
- l) The construction of the said works must not commence until a draft Operation, Maintenance and Surveillance Manual (including a surveillance schedule for first filling) and an Emergency Preparedness Plan have been submitted to the satisfaction of the Dam Safety Officer.
- m) Before commencing operation of the works authorized under clause (h), the licensee must to the satisfaction of the Engineer:
  - 1) submit a report on the parameters and procedures for the operation of the works;
  - 2) submit and implement an environmental management plan (OEMP) for the management and mitigation of operational impacts;

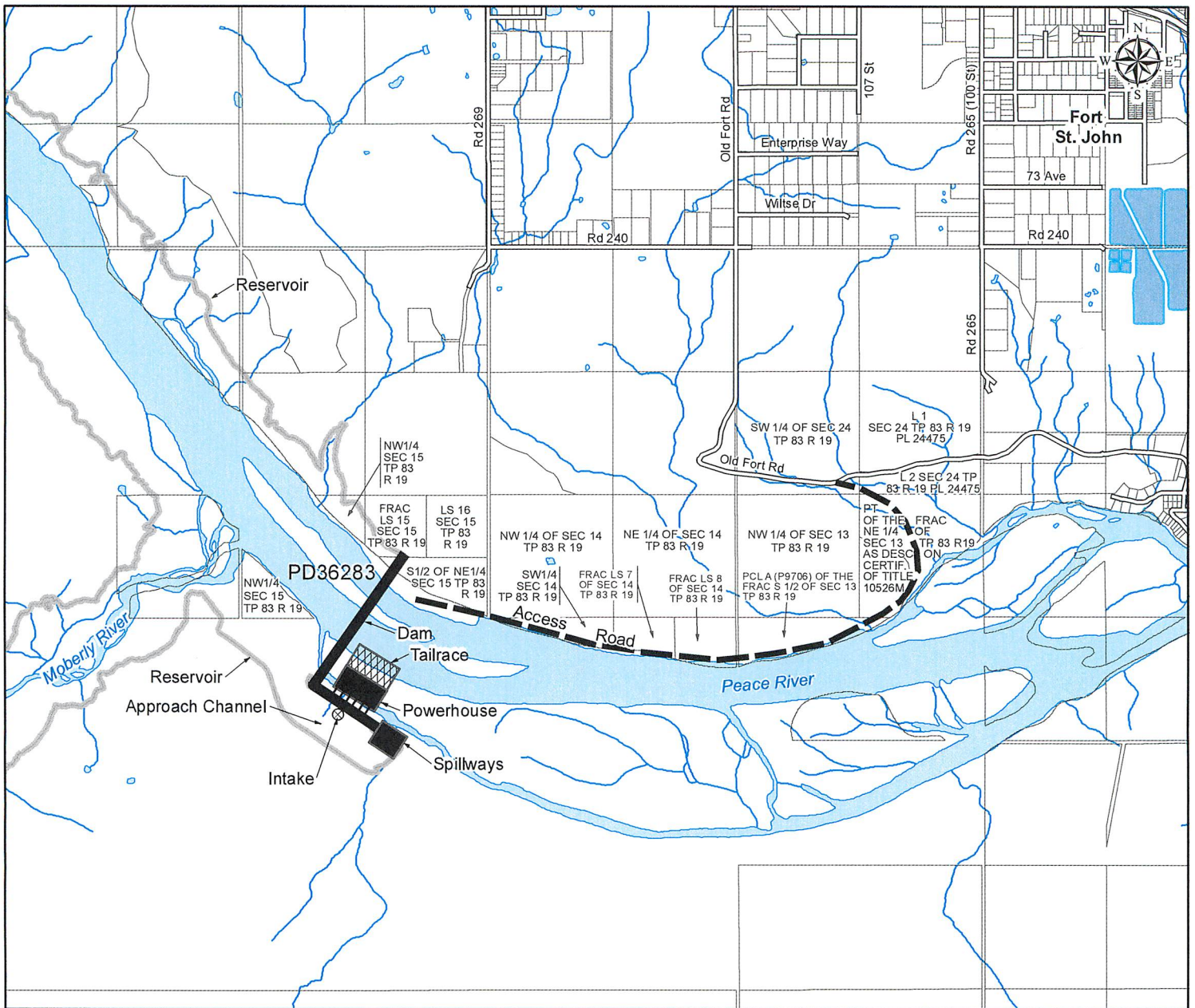
- 3) submit and implement a plan for the measurement of in-stream flows and of the flow of water diverted from the stream under this licence; and
  - 4) obtain leave to commence the diversion and use of water authorized in this licence in writing from the Engineer.
- n) The licensee must operate the works authorized under clause (h) in accordance with:
    - 1) procedures ordered by the Engineer, including any order for the regulation of the diversion, rate of diversion and use of water as may be required for the preservation of fish and wildlife; and
    - 2) any amendment of the procedures ordered by the Engineer.
  - o) Remedial measures for the protection or enhancement of fisheries and wildlife habitat shall be carried out as directed by the Comptroller of Water Rights after consultation with the licensee and fisheries and wildlife agencies. The remedial measures include programmes such as an adequately funded Peace Site C Fish and Wildlife Compensation Program and other studies related to these resource values, which pertain to the impacts of construction, footprint, and continuing operations of the project. The licensee is required to assess the extent of these impacts at the end of the first five years of operation and report to the Comptroller of Water Rights on whether compensation funding is adequate to address these impacts. Should funding for fish and wildlife protection or enhancements and compensation programmes be inadequate to meet objectives in a timely manner, the licensee may be directed to provide additional funding.
  - p) At the discretion of the Comptroller of Water Rights, the licensee's rights issued under this licence may be deemed to be subsequent to any rights granted under any licence or licences which may be issued at any time for the consumptive use of water.
  - q) The licensee must:
    - 1) replace intakes, wells or other diversion works of persons authorized to divert or use water, who hold earlier dates of precedence (whether licensed, authorized or deemed) than that of this licence, and whose works are used for diversion or use of water within the area impacted by the project, if the undertaking authorized by this licence will have a significant adverse impact on the source of their water supply, or the proper operation or use of those works, or otherwise prevent their continued operation or use for the purpose or in the manner intended for water supply to those impacted water users; and
    - 2) if, in particular cases, it is not feasible or practicable to replace those intakes, wells or other diversion works, as described in clause (q) 1), the licensee must instead provide interim water supply to such impacted water users until such time as an alternative source of water supply can be determined and must assist such impacted water users to secure replacement rights, whether licensed, authorized or deemed, or to secure access to an alternative source of water supply in place of their impacted intake, wells or other diversion works and impacted source of water supply, as may be required to replace that water supply or to enable its use for the purpose and manner required by those impacted water users, including by installing any additional works required for that purpose.

- r) Submit to the Engineer, and as directed by the Engineer, within six months of receiving the leave to commence the diversion and use of water, the drawings of record that show the works as they were constructed.
- s) Final Operation, Maintenance and Surveillance Manual and Emergency Preparedness Plan must be submitted to the satisfaction of the Dam Safety Officer during the first year of operation.
- t) The construction of works authorized in clause (h) shall be completed and the water shall be beneficially used prior to December 31, 2025. Thereafter, the licensee shall continue to make regular and beneficial use of the water in a manner authorized herein.
- u) The term of this licence is 40 years from the date of issuance of this licence.



Pieter Bekker  
Deputy Comptroller of Water Rights






WATER DISTRICT: PEACE RIVER  
 PRECINCT: DAWSON CREEK, FORT ST. JOHN  
 LAND DISTRICT: PEACE RIVER

Signature: 

Date: Feb. 26, 2016

LEGEND:

Scale 1:40,000  
 Point of Diversion   
 Map Number 94A.016, 94A.016





# Province of British Columbia

## *Water Act*

### **CONDITIONAL WATER LICENCE**

British Columbia Hydro and Power Authority is hereby authorized to store water as follows:

- a) The stream on which the rights are granted is Peace River and the storage is in Site C Reservoir.
- b) The site of the dam which creates Site C Reservoir is PD36283 located as shown on the attached plan.
- c) The date from which this licence shall have precedence is January 11, 2008.
- d) The purpose for which this licence is issued is storage. The storage purpose supports the power purpose at the Site C Generating Station as set out in Conditional Water Licence 132990.
- e) Conditions for the storage of water in Site C Reservoir are as follows:
  - 1) The water may be stored in the reservoir between the elevations of 460.0 metres, the minimum operating level, and 461.8 metres, the full supply level, measured at the dam using Geodetic Survey of Canada datum. The volume of water authorized to be stored between the minimum operating level and the full supply level under this licence is estimated to be 165 million cubic metres.
  - 2) Surcharging the reservoir above the full supply level, drafting the reservoir to the full supply level, and drafting the reservoir below the minimum operating level shall be done in accordance with the Operation, Maintenance and Surveillance Manual.
  - 3) The Comptroller of Water Rights may from time to time, order a different operating range than specified in clause (e) 1).
- f) The water may be collected into storage, held in storage, and used throughout the whole year.
- g) This licence is appurtenant to the undertaking of British Columbia Hydro and Power Authority to generate power at the Site C Generating Station set out in Conditional Water Licence 132990.

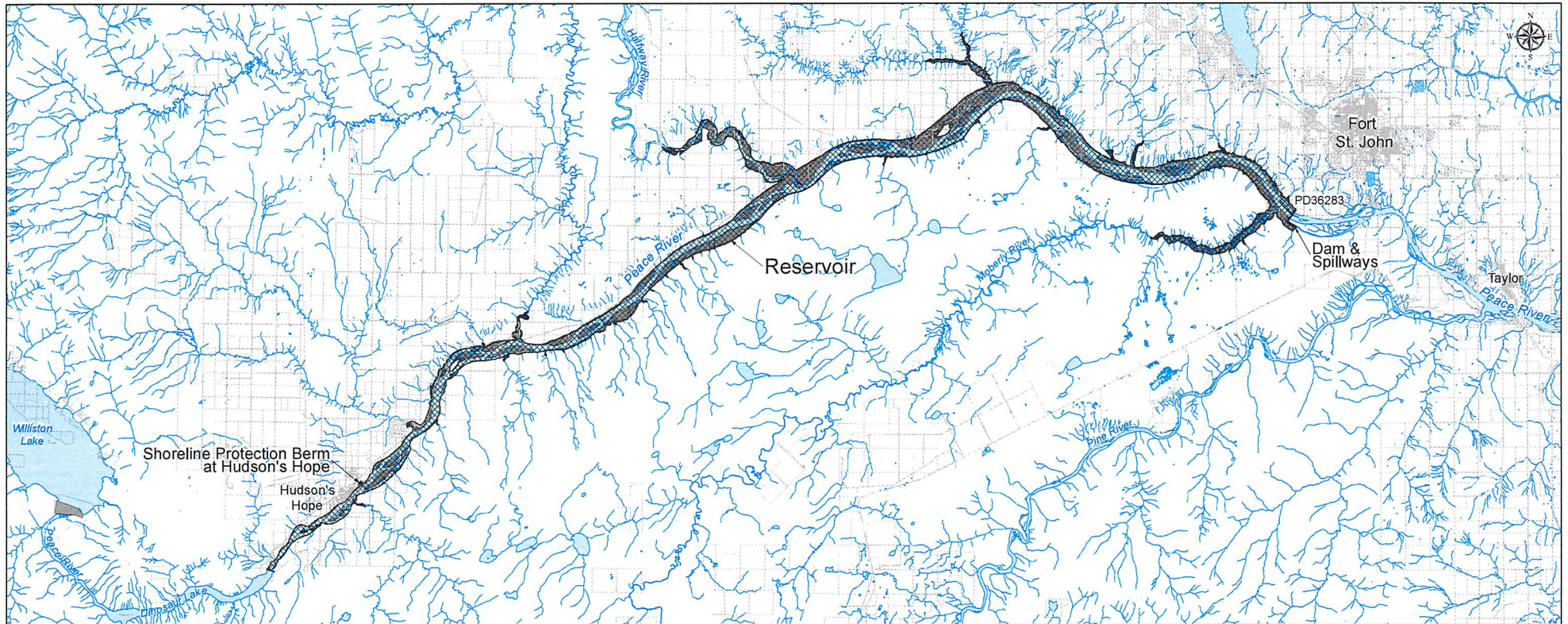
- h) The works authorized for the Site C Reservoir are:
  - 1) a dam;
  - 2) spillways;
  - 3) a reservoir; and
  - 4) a shoreline protection berm at Hudson's Hope,all of which shall be located approximately as shown on the attached plan; and
  - 5) ancillary works associated with the operation of the dam.
- i) The dam authorized under clause (h) is subject to the Dam Safety Regulations and shall be designed, constructed and maintained, including any alterations, to the satisfaction of a Dam Safety Officer under the *Water Act* (the "Dam Safety Officer") and in accordance with the *Canadian Dam Association Guidelines*.
- j) Before commencing construction of the works authorized under clause (h) of this licence, the licensee must to the satisfaction of the Comptroller of Water Rights:
  - 1) retain a professional engineer registered in the province of British Columbia (the "Independent Engineer") who will provide services to the Engineer under the *Water Act* (the "Engineer") for the regulation of construction of the works (Attachment A);
  - 2) retain a person with professional qualifications (the "Independent Environmental Monitor") who will monitor environmental impacts from the construction of works (Attachment B);
  - 3) submit, the following:
    - a. plans that show the general arrangement of the works;
    - b. criteria for the design of the works;
    - c. criteria for the operation of the works;
    - d. a schedule for the construction of the works;
    - e. an environmental management plan (CEMP) for the management and mitigation of construction impacts;
  - 4) complete all monitoring, mitigation and compensation projects required for each Leave to Commence Construction, as specified in Schedule A; and
  - 5) obtain Leave to Commence Construction (LCC) in writing from the Engineer.
- k) Before undertaking construction of any component of works for which an LCC is issued under (j) 5), the licensee must:
  - 1) ensure that the design drawings for the works to be constructed are signed and sealed by a professional engineer registered in the province of British Columbia (the "Design Engineer");
  - 2) ensure that a professional engineer registered in the province of British Columbia (the "Construction Engineer") supervises the construction of the works; and
  - 3) obtain a letter from the Independent Engineer that the actual construction of that component work may proceed.

- l) The construction of the said works must not commence until a draft Operation, Maintenance and Surveillance Manual (including a surveillance schedule for first filling) and an Emergency Preparedness Plan have been submitted to the satisfaction of the Dam Safety Officer.
- m) The licensee shall clear the reservoir, including ongoing debris management, in the manner and to the extent as may be directed by the Comptroller of Water Rights after consultation with the provincial forests ministry.
- n) The licensee shall provide public access to the reservoir area as may be directed by the Comptroller of Water Rights.
- o) At the discretion of the Comptroller of Water Rights, the licensee's rights issued under this licence may be deemed to be subsequent to any rights granted under any licence or licences which may be issued at any time for the consumptive use of water.
- p) The licensee must:
  - 1) replace intakes, wells or other diversion works of persons authorized to divert or use water, who hold earlier dates of precedence (whether licensed, authorized or deemed) than that of this licence, and whose works are used for diversion or use of water within the area impacted by the project, if the undertaking authorized by this licence will have a significant adverse impact on the source of their water supply, or the proper operation or use of those works, or otherwise prevent their continued operation or use for the purpose or in the manner intended for water supply to those impacted water users; and
  - 2) if, in particular cases, it is not feasible or practicable to replace those intakes, wells or other diversion works, as described in clause (p) 1), the licensee must instead provide interim water supply to such impacted water users until such time as an alternative source of water supply can be determined and must assist such impacted water users to secure replacement rights, whether licensed, authorized or deemed, or to secure access to an alternative source of water supply in place of their impacted intake, wells or other diversion works and impacted source of water supply, as may be required to replace that water supply or to enable its use for the purpose and manner required by those impacted water users, including by installing any additional works required for that purpose.
- q) Remedial measures for the protection or enhancement of fisheries and wildlife habitat shall be carried out as directed by the Comptroller of Water Rights after consultation with the licensee and fisheries and wildlife agencies. The remedial measures include programmes such as an adequately funded Peace Site C Fish and Wildlife Compensation Program and other studies related to these resource values, which pertain to the impacts of construction, footprint, and continuing operations of the project. The licensee is required to assess the extent of these impacts at the end of the first five years of operation and report to the Comptroller of Water Rights on whether compensation funding is adequate to address these impacts. Should funding for fish and wildlife protection or enhancements and compensation programmes be inadequate to meet objectives in a timely manner, the licensee may be directed to provide additional funding.

- r) Following the substantial completion of construction, filling of the reservoir must not commence until written leave to commence diversion is given by the Engineer.
- s) Before commencing operation of the works authorized under clause (h), the licensee must to the satisfaction of the Engineer:
  - 1) submit a report on the parameters and procedures for the operation of the works;
  - 2) submit and implement an environmental management plan (OEMP) for the management and mitigation of operational impacts; and
  - 3) obtain leave to commence the storage of water authorized in this licence in writing from the Engineer.
- t) Submit to the Engineer, and as directed by the Engineer, within six months of receiving the leave to commence the storage of water, the drawings of record that show the works as they were constructed.
- u) Final Operation, Maintenance and Surveillance Manual and Emergency Preparedness Plan must be submitted to the satisfaction of the Dam Safety Officer during the first year of operation.
- v) The construction of works authorized in clause (h) shall be completed and the water shall be beneficially used prior to December 31, 2025. Thereafter, the licensee shall continue to make regular and beneficial use of the water in a manner authorized herein.
- w) The term of this licence is 40 years from the date of issuance of this licence.




Pieter Bekker  
Deputy Comptroller of Water Rights



WATER DISTRICT: PEACE RIVER, PRINCE GEORGE  
PRECINCT: DAWSON CREEK, FORT ST. JOHN, PARSNIP  
LAND DISTRICT: PEACE RIVER

LEGEND:  
Scale 1:250,000  
Point of Diversion ●  
Map Number 94A

Signature:   
Date: Feb. 26, 2016





# Province of British Columbia

## *Water Act*

### **PERMIT AUTHORIZING THE OCCUPATION OF CROWN LAND**

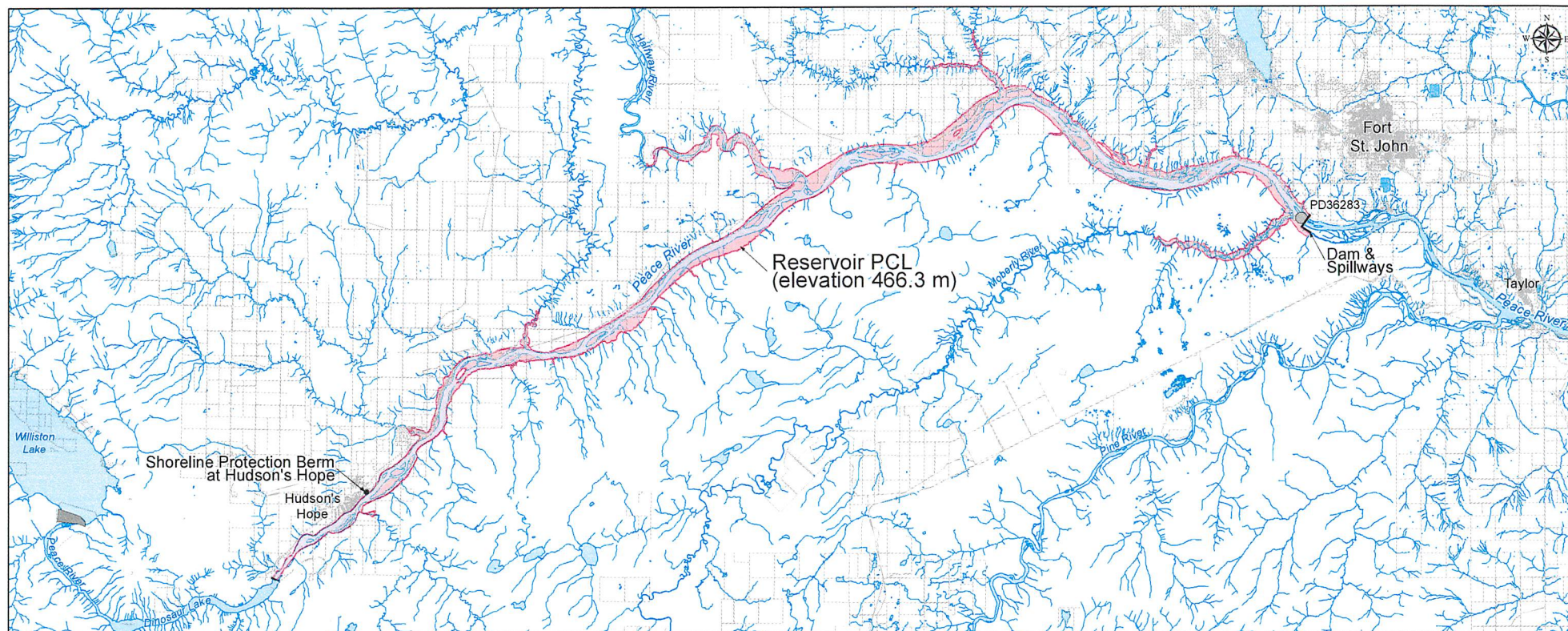
The Holder of Conditional Water Licence C132991 whose licence authorizes the storage of water from Peace River in the Site C Reservoir is hereby authorized to occupy Crown land by flooding and by constructing, maintaining and operating thereon the works authorized under the said licence.

- (a) The Crown land which is authorized to be occupied under this permit is described as the Crown land below the 466.3 metre contour being Site C Reservoir, the location of which is shown approximately on the plan attached. The storage of water in the reservoir is as set out in Conditional Water Licence 132686, or as otherwise approved in writing by the Comptroller of Water Rights. Flooding of Crown land above the full supply level set out in Conditional Water Licence 132686 must be in accordance with the Operation, Maintenance and Surveillance Manual referred to in the above licence.
- (b) The approximate area of Crown land authorized to be occupied under this permit is 95,801,000 square metres (9,580.10 hectares) for a reservoir.
- (c) Prior to cutting, destroying or clearing of any timber necessary to construct, maintain and operate the said works or the clearing of the said lands which may be flooded, the permittee shall apply for and obtain a licence to cut timber from the provincial forests ministry. The amount of stumpage, royalty and/or compensation payable to the Crown in respect of trees, including merchantable or young growth, cut, removed, damaged, or destroyed by the permittee, shall be the sum or sums fixed by the provincial forests ministry.
- (d) This permit is appurtenant to the undertaking to which the aforesaid water licence is appurtenant.
- (e) This permit shall become void if the water licence with respect to which the permit is issued should terminate, be abandoned or cancelled, or amended so as to render this permit unnecessary.
- (f) This permit is issued and accepted on the understanding that the permittee shall indemnify and save harmless the Government of the Province of British Columbia for all loss, damage to works, cost or expense suffered by the permittee by reason of the Crown land or any portion thereof being submerged or damaged by erosion or otherwise affected by flooding.

- (g) The holder of this permit shall not be entitled to compensation if the Crown grants permits to other persons to occupy the land affected by this permit.
- (h) In the event of a dispute at any time with respect to the area or boundaries of the land affected by this permit, the holder shall, at their own expense, have the said land surveyed by a duly authorized surveyor

A handwritten signature in black ink, appearing to read 'Pieter Bekker', written in a cursive style.


Pieter Bekker  
Deputy Comptroller of Water Rights



WATER DISTRICT: PEACE RIVER, PRINCE GEORGE  
PRECINCT: DAWSON CREEK, FORT ST. JOHN, PARSNIP  
LAND DISTRICT: PEACE RIVER

LEGEND:

Scale 1:250,000  
Permit over Crown Land  
Map Number 94A

Signature:   
Date: Feb. 26, 2016

P.C.L. 28283  
File 7001837