



Province of British Columbia

Water Act

Order Section 88

File Nos.: 0234965 and 5000259

WHEREAS, British Columbia Hydro and Power Authority (BC Hydro) is the holder of Final Water Licences 120176 and 120177 which authorize the diversion and use of water for power purpose and conservation purpose at the Clayton Falls Power Development;

WHEREAS, the works authorized by Final Water Licences 120176 and 120177 at the Clayton Falls Power Development include: for power purpose a dam (PD40178), a penstock, a surge tank, powerhouse, and tailrace; and for conservation purpose a diversion structure (PD63362) and pipeline conveying water to the tailrace;

WHEREAS, the operation of the works can also benefit the viability of fish and fish habitat in the headpond, lower Clayton Falls Creek and the tailrace and BC Hydro has engaged in public consultation to determine values for system parameters and to develop operating procedures that may provide those fisheries benefits;

WHEREAS, the licensee has submitted a Water Use Plan, which recommends changes to the operation of Clayton Falls Power Development which are intended to provide specific benefits for: fish in lower Clayton Falls Creek; fish in the headpond; and fish in the tailrace;

WHEREAS, I have accepted the Water Use Plan for the Clayton Falls Power Development, dated November 22, 2004; and

WHEREAS, BC Hydro has proposed a monitoring program to determine if operating the works in accordance with the operating parameters and procedures in the Clayton Falls Water Use Plan will provide the above listed expected benefits;

I HEREBY ORDER THAT:

1. The works authorized under Final Water Licences 120176 and 120177 must be operated as follows:
 - a. Commencing on April 1, 2006, a minimum flow of water of 0.05 cubic metres per second must be released from the dam at all times.
 - b. During maintenance and civil inspections of the dam, the headpond shall be drafted gradually over a two hour period.
 - c. If frazil or anchor ice is present within the tailrace, scheduled maintenance or shutdowns are not to proceed.

- d. If frazil or anchor ice forms in the tailrace during unit shutdown, flow to the tailrace shall be increased via the fish bypass valve or by bringing the generator online.
 - e. The intake for the conservation works at PD63362 is to be shut off at all times except during periods when flow from PD40178 to the tailraces is reduced due to annual maintenance and penstock dewatering, or when other conditions exist which would result in a tailrace flow of less than 0.08 cubic metres per second.
2. The licensee must evaluate the effectiveness of operations in accordance with the parameters and procedures ordered in 1 above by undertaking an aquatic ecosystem productivity monitoring program as set out below:
 - a. The licensee shall, within four months of the date of this order, develop and submit for approval terms of reference for a four year monitoring program based on Appendix F of the Clayton Falls Water Use Plan Report of the Consultative Committee, dated July 2003; and
 - b. On approval in writing by the Comptroller of Water Rights of the terms of reference for the monitoring program, BC Hydro shall implement the monitoring program and submit information to the Comptroller in accordance with the terms of reference.
 3. Before September 1, 2005, the licensee shall submit plans for a measuring device that is suitable for measuring the minimum flow of 0.05 cubic metres per second which is to be released from the dam on Clayton Falls Creek at PD40178 in accordance with 1 above.
 4. On approval in writing of the plans submitted in accordance with 3 above and receiving leave to commence construction, alter the Dam on Clayton Falls Creek to include the measuring device as approved.
 5. The licensee may operate the works in an alternate manner in the event of an emergency, a dam safety requirement, or an extreme hydrological event.
 6. All emergency operations, or other deviations from those ordered in 1 above be reported to the Comptroller of Water Rights in a timely manner.

Dated at Victoria this 9th day of December, 2004.



Pieter J. Bekker
Deputy Comptroller of Water Rights



Province of British Columbia

Water Act

Final Water Licence

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

- a) The stream on which the rights are granted is Clayton Falls Creek.
- b) The points of diversion are located at point PD40178 and PD63362 as shown on the attached plan.
- c) The date from which this licence shall have precedence is June 7, 1990.
- d) The purposes for which this licence is issued are power, which is to be generated at the Clayton Falls Generating Station, and conservation.
- e) The maximum quantity of water which may be diverted is:
 - i. 2.50 cubic metres per second for power purpose at PD40178; and
 - ii. 0.08 cubic metres per second for conservation purpose at PD63362.
- f) Water may be diverted for power purpose and conservation purpose throughout the whole year.
- g) This licence is appurtenant to the power undertaking and the conservation project of the licensee and the land upon which the water is to be used, which is Lot 1 of District Lot 4, Range 3, Coast District, Plan 15223, on which a powerhouse and conservation works are situated.
- h) The works authorized at the Clayton Falls Generating Station are a dam (PD40178), a penstock, a surge tank, powerhouse and tailrace. Conservation works consisting of a diversion structure (PD63362) and pipeline conveying water to the tailrace are also authorized.
- i) A minimum flow of water of 0.08 cubic metres per second must be provided to the tailrace at all times.
- j) This licence is issued in substitution of Conditional Water Licence 72838.

Pieter J. Bekker
Deputy Comptroller of Water Rights

File: 5000259

Dated: 12/09/04

Final Water Licence: 120177



Province of British Columbia
Water Act

ORDER

Section 88 of the
Water Act of British Columbia

File Nos.: 0234965, 5000259, D801103-00

IN THE MATTER OF Water Licence FL120176 and FL120177, held by British Columbia Hydro and Power Authority (BC Hydro), which authorizes power generation and the Clayton Falls Dam which is identified by Provincial Dam Number D810003-00.

WHEREAS BC Hydro was ordered on December 9, 2004 to release a minimum of 0.05 cubic metres per second from the dam at all times.

WHEREAS BC Hydro plans to construct a new fish water release and measurement device at Clayton Falls Dam to accomplish this requirement.

WHEREAS the key components of the project are:

- A 0.14 m diameter pipe approximately 1 metre long,
- Installed in the lower flashboard at an elevation of approximately 76.75m.

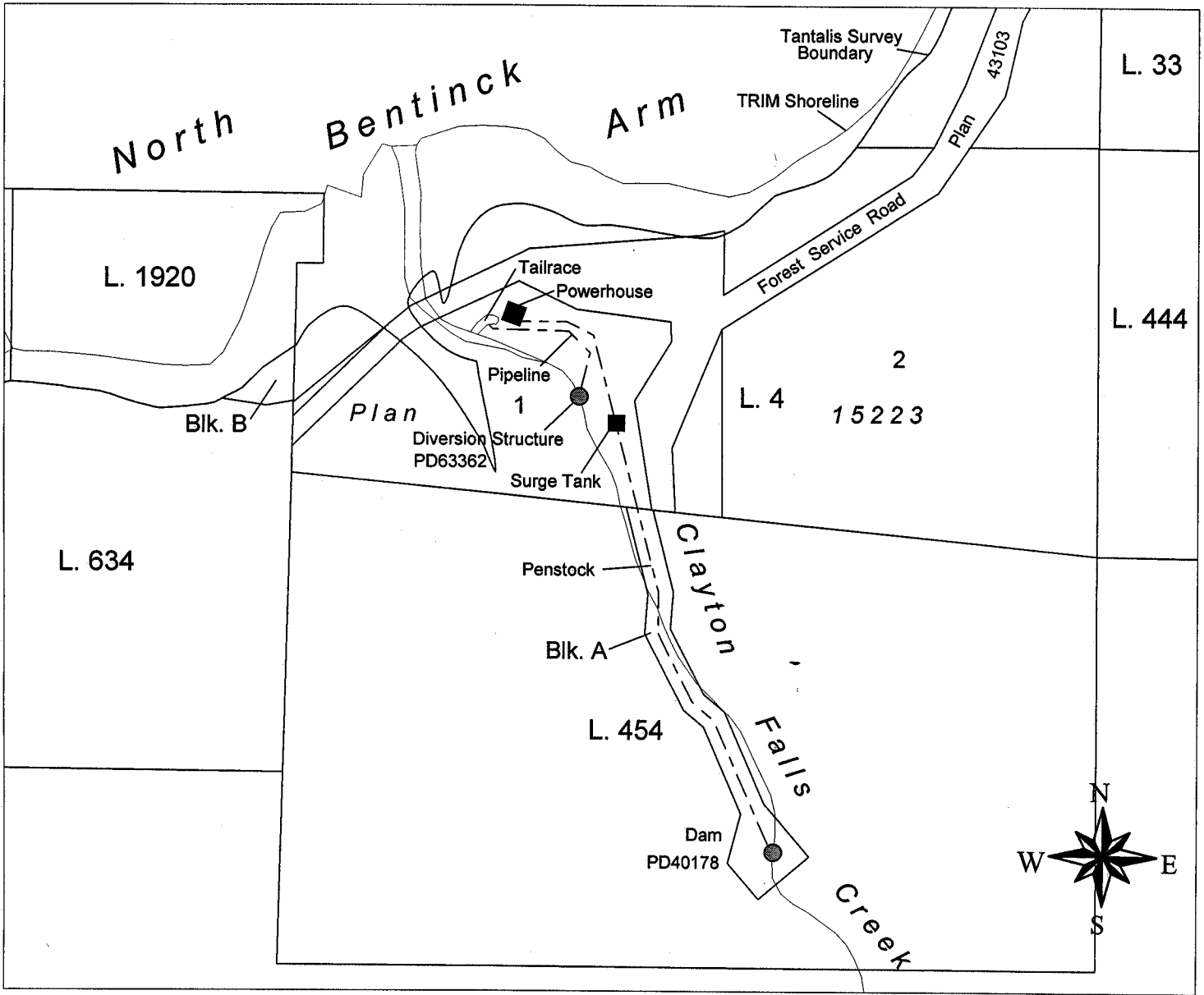
WHEREAS BC Hydro has submitted the terms of reference dated October 28, 2005, showing the details of the proposed work.

WHEREAS the Dam Safety Section has reviewed and accepted the plans as being satisfactory.

NOW THEREFORE, I, Glen Davidson, Deputy Comptroller of Water Rights, hereby order pursuant to Section 88 of the *Water Act* of British Columbia, and pursuant to the Dam Safety Regulation, BC Reg. 44/2000, OIC 131/2000, that BC Hydro has authorization to proceed with fish water release to the Clayton Falls Dam. Minor changes may be made if signed off by the Professional Engineer of record for the project.

Dated at Victoria, British Columbia this 12th day of December, 2005.

Glen Davidson
Deputy Comptroller of Water Rights



WATER DISTRICT:
 PRECINCT:
 LAND DISTRICT:

CARIBOO
 BELLA COOLA
 RANGE 3, COAST DISTRICT

Signature: *[Handwritten Signature]*
 Date: 12/09/04

LEGEND:

Scale: 1:6,000
 Point of Diversion: ●
 Map Number: WR 93D.036
 Pipe: — — — — —

F.L. 120177 for C.L. 72838
 File 5000259