



Province of British Columbia

Water Act

Order

Water Act
Section 88

File No. 76975-35/Spillimacheen

WHEREAS British Columbia Hydro and Power Authority (BC Hydro) is the operator of the Spillimacheen hydroelectric project, in respect of which it holds Final Water Licences 120903 and 120904;

WHEREAS the licensee has submitted the Spillimacheen Project Water Use Plan, which recommends changes to the operations of the Spillimacheen Project and which are intended to benefit fisheries and wildlife;

WHEREAS BC Hydro has engaged in public consultation to determine values for system parameters and to develop operating procedures which may provide benefits as described below;

WHEREAS I have accepted the Spillimacheen Project Water Use Plan dated July 15, 2005; and

WHEREAS the Spillimacheen Project Water Use Plan proposes a monitoring programme to determine whether operating the facility in accordance with the operating parameters and procedures in the Spillimacheen Project Water Use Plan will provide the expected benefits.

I HEREBY ORDER THAT:

1. The licensee shall release a minimum flow of 0.85 cubic metres per second (m^3/s) from Spillimacheen Dam (PD 24224) into the Spillimacheen River year round when inflows exceed $0.85 m^3/s$. When inflows are less than $0.85 m^3/s$ the licensee shall release the available inflow.
2. The licensee shall, for planned outages, ramp down the generation units at a maximum rate of $4.25 m^3/s$ per hour when total reduction in discharges will reduce river flow immediately downstream of the generating station by more than 20%.
3. The licensee shall submit a monitoring plan within four months of the date of this order for acceptance by the Comptroller, outlining details of the following monitoring programmes:
 - a. Assess various rampdown rates (initially a 2-hour rate and up to a 5-hour rate) over a five-year period to determine the lowest threshold rate at which river stage change impacts on fish can be effectively mitigated. As part of this study, review

efficacy of reducing headpond operating range to reduce spill discharge lag time and, consequently, stage change impacts on fish.

- b. Conduct three field surveys over a five-year period to determine whether the release of 0.85 m³/s is adequate to prevent total freeze-up of pool habitat and maintain habitat connectivity within the canyon channel during sustained periods of cold weather.
 - c. Assess the recruitment of gravel through the undersluice to the lower reaches of the river over a period of five years.
4. The licensee shall implement monitoring in accordance with the monitoring plan accepted by the Comptroller of Water Rights and shall report monitoring results to the Comptroller annually until the conclusion of the five-year monitoring term.
 5. With respect to the maintenance and provision of records the licensee must:
 - a. Keep records of
 - i. Flow release from Spillimacheen Dam into Spillimacheen River
 - ii. Flow release from Spillimacheen Powerhouse into Spillimacheen River
 - b. Provide a written report to the Comptroller of Water Rights on or before February 1 of each year summarizing the records from the previous calendar year; and
 - c. Provide on request of the Comptroller of Water Rights records collected under 5.a.
 6. The licensee may operate the works in an alternate manner in the event of an emergency, dam safety requirement, or an extreme hydrological event.
 7. All emergency operations or other deviations from operations ordered above shall be reported to the Comptroller of Water Rights in a timely manner.

Dated at Victoria, B.C., this 21st day of July, 2005.



Pieter J. Bekker
Deputy Comptroller of Water Rights



Province of British Columbia

Water Act

FINAL WATER LICENCE

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

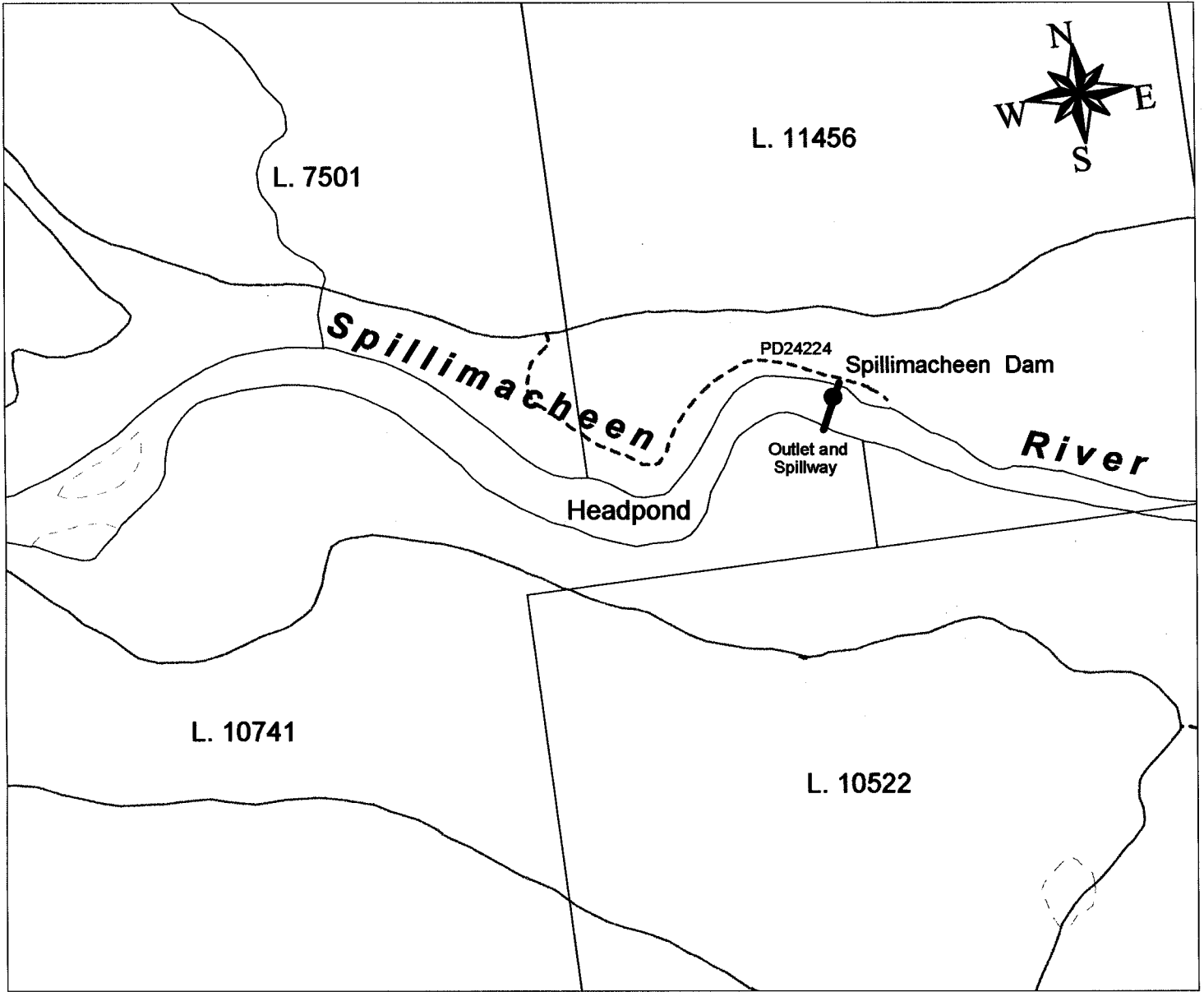
- a) The stream on which the rights are granted is the Spillimacheen River and the reservoir is the Spillimacheen River Headpond.
- b) The site of the dam which forms the Spillimacheen River Headpond is PD 24224, located as shown on the attached plan.
- c) The date from which this licence shall have precedence is June 3, 1953.
- d) The purpose for which this licence is issued is storage to support the power purpose at the Spillimacheen Generating Station authorised under Final Water Licence 120903.
- e) Conditions for the storage of water in the Spillimacheen River Headpond are as follows:
 - i. The water may be stored in the headpond between the elevations of 863.13 metres (minimum operating level) and 865.56 metres, (full supply level), measured at the dam using Geodetic Survey of Canada (GSC) datum.
 - ii. The volume of water authorised to be stored between the minimum operating level and the full supply level under this licence is estimated to be 58,300 cubic metres.
 - iii. 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 & Surveillance Manual.
- f) Water may be collected into storage, held in storage and used throughout the whole year.
- g) This licence is appurtenant to the undertaking as set out in clause (g) of Final Water Licence 120903, Spillimacheen Generating Station.

- h) The works authorised are a dam and spillway.
- i) This licence and Final Water Licence 120903 are issued in substitution of Conditional Water Licence 21667.



Pieter J. Bekker
Deputy Comptroller of Water Rights

File Number 0200060 Date Issued *July 21, 2005* Final Licence 120904



WATER DISTRICT:
PRECINCT:
LAND DISTRICT:

**GOLDEN
SPILLIMACHEEN
KOOTENAY**

Signature: *BBuhler*
Date: *July 21, 2005*

LEGEND:

Scale: 1:7,000
Point of Diversion: ●
Map Number: WR 82K.088

**F.L. 120904 for C.L. 21667
File 0200060**