

# Peace River Water Use Plan Monitoring Program Terms of Reference

**GMSMON-11 Peace River Spill TGP/Temperature Monitoring** 

Addendum 2 June 28, 2019

## A2.0 Addendum 2 to GMSMON-11 Peace River Spill TGP/Temperature Monitoring

#### A2.1 Addendum Rationale

GMSMON-11 is a conditional program involving the installation of total gas pressure (TGP) monitoring equipment upstream and downstream of the W.A.C. Bennett and Peace Canyon Dams and in various locations in the Peace River prior to, during, and after a spill. Maintenance of TGP equipment is covered under the GMSWORKS-2 Peace River Baseline TGP/Temperature program. In the event of a spill, both TGP and temperature data will be recorded. Following a spill, a report detailing the findings will be produced. Monitoring under GMSMON-11 was scheduled to continue for a 10-year duration beginning in 2008 and ending in 2019.

This Addendum extends GMSMON-11 to ensure TGP monitoring occurs in the event spill discharges meet criteria specified in Schedule D of the Order (Spill Protocol Management Plans), in order to assess and quantify the potential environmental effects of the spill compared to baseline data. Monitoring will occur in the W.A.C. Bennett Dam forebay and tailrace, and the Peace Canyon Dam forebay and tailrace. This Addendum will discontinue TGP monitoring at sites that are in the future inundation zone of the Site C reservoir including sites at Hudson's Hope and downstream of each of the Halfway River and Pine River.

#### A2.2 Objective and Scope

Addendum 2 extends GMSMON-11 to ensure TGP will be monitored between the W.A.C. Bennett Dam forebay and the Peace Canyon Dam tailrace in the event of a spill. If a spill is forecast to occur, TGP loggers will be installed and monitored prior to (1-2 weeks), during, and after (1-2 weeks) a spill. Data will be compiled and reported including an analysis of showing the relationship between TGP and discharge and potential duration of elevated TGP exposure to fish.

TGP loggers are to be installed at the following locations:

- Forebay of W.A.C. Bennett Dam;
- Forebay of Peace Canyon Dam;
- Tailrace of W.A.C. Bennett Dam; and
- Tailrace of Peace Canyon Dam.

TGP loggers will no longer be installed at locations within the Site C inundation zone:

- Peace River at Hudson Hop pumphouse station;
- Peace River downstream of the Halfway River; and
- · Peace River downstream of the Pine River.

#### A2.3 Approach

Tasks outlined in the GMSMON-11 Terms of Reference (February 9, 2008) will continue to be followed as part of this Addendum.

#### A2.4 Key Water Use Decision Affected

Results of Addendum 2 will be used to inform future spill strategies that could reduce any TGP generation that occurs during a spill.

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### A2.5 Schedule and Budget

Total Program Cost: \$62,485.

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