



Application Determination Number: 100100473

September 19, 2016

LNG Canada Development Inc.
400 – 4th Avenue SW
Calgary, Alberta T2P 0J4

Attention: Surface Land Administrator

Re: Short Term Water Use Authorization

Authorization

The BC Oil and Gas Commission ("The Commission") hereby authorizes LNG Canada Development Inc. (the "permit holder") under Section 10 of the *Water Sustainability Act* to divert and use water from November 27, 2015 to November 26, 2017 for the purpose "oil and gas purpose" .

The approved water withdrawal points are the Beaver Creek at: UTM Zone 9 location N. 5986860, E. 519491 and N. 5986740, E. 519564; the Anderson Creek at: UTM Zone 9 location N. 5985833, E. 520147 and N. 5985602, E. 520209; the Moore Creek at: UTM Zone 9 location N. 5984852, E. 520223; and the Kitimat River at: UTM Zone 9 location N. 5988662, E. 520572.

Conditions

1. No instream works are permitted under this authorization.
2. A copy of this authorization must be available for inspection at the point of diversion and use location(s).
3. Water withdrawn under this authorization must only be used for the purposes of carrying out the oil and gas activities of the permit holder.
4. The maximum quantity of water that may be diverted for Beaver Creek, Anderson Creek, and Moore Creek is 190 m³/day, at a rate not to exceed 14L/s. The maximum quantity of water that may be diverted for the Kitimat River is 500 m³/day, at a rate not to exceed 14L/s.
5. The maximum quantity of water that may be diverted during the duration of the authorization for Beaver Creek, Anderson Creek, and Moore Creek is 20,000m³. The maximum quantity of water that may be diverted during the duration of the authorization for the Kitimat River is 365,000m³.
6. Water withdrawal must not occur where:
 - a. stream discharge is less than 55 L/s;
 - b. the diversion will cause the stream discharge to fall below 55 L/s;
 - c. stream (wetted) depth is less than 0.30 metres (12 inches) at the withdrawal location; or

- d. the diversion will cause the stream (wetted) depth to fall below 0.30 metres (12 inches) at the withdrawal location.
7. On any lake, water withdrawal must cease if drawdown exceeds 0.10 metres relative to the water level documented at the commencement of withdrawal activities. In the event that drawdown exceeds 0.10 metres, withdrawals may resume only when water levels have risen above the 0.10 metres drawdown level.
8. Water must not be diverted or withdrawn from any beaver pond.
9. End-of-pipe intakes must be screened with maximum mesh sizes in accordance with the Fisheries and Oceans Canada "Freshwater Intake End-of-Pipe Fish Screen Guideline".
10. The permit holder must maintain accurate records of all water withdrawal activities throughout the term authorized. Water withdrawal records for each diversion point, including "0" values for months where no water was withdrawn, must be recorded monthly. Quarterly reports are due on or before April 25th, July 25th, October 25th, and January 25th, via eSubmission.
11. At any time, the Commission may suspend short term water use previously authorized. Water use suspensions will remain in place until such time as the Commission notifies permit holders that water withdrawals may resume.
12. For POD #1a (UTM Zone 9 location N. 5986860, E. 519491) and #1b (UTM Zone 9 location N. 5986740, E. 519564), water withdrawals are not authorized for the months of July and August.
13. For POD #2a (UTM Zone 9 location N. 5985833, E. 520147) and #2b (UTM Zone 9 location N. 5985602, E. 520209), water withdrawals are only authorized for the months of May, June, October and November.
14. For POD #3 (UTM Zone 9 location N. 5984852, E. 520223), water withdrawals are not authorized for the month of August.
15. Notwithstanding condition 4, the permit holder may divert a maximum of 10,000m³ at a rate not to exceed 116L/s from the Kitimat River between September 19, 2016 and October 19, 2016.



Lori Phillips
Authorizations Manager

pc: WorelyParsons
Application Determination No: 100100473
FN Community(ies) Haisla Nation



OGC File: 9642948

November 27, 2015

LNG Canada Development Inc.
Shell Center, 32nd Floor, 400-4th Ave SW, PO Box 100, Station M
Calgary, Alberta, T2P 0J4

Attention: Surface Land Administrator

Re: Approval for Short Term Use of Water

This approves you, under Section 8 of the *Water Act* to divert and use water as follows:

1. The approved water withdrawal points are the Beaver Creek at: UTM Zone 9 location N. 5986860, E. 519491 and N. 5986740, E. 519564; the Anderson Creek at: UTM Zone 9 location N. 5985833, E. 520147 and N. 5985602, E. 520209; the Moore Creek at: UTM Zone 9 location N. 5984852, E. 520223; and the Kitimat River at: UTM Zone 9 location N. 5988662, E. 520572.
2. The approved use of water is restricted to the oil and gas activities of the Operator.
3. The maximum quantity of water that may be diverted for Beaver Creek, Anderson Creek, and Moore Creek is 190 m³/day, at a rate not to exceed 14l/s (0.5 cfs). The maximum quantity of water that may be diverted for the Kitimat River is 500 m³/day.
4. The maximum quantity of water that may be diverted during the duration of the authorization for Beaver Creek, Anderson Creek, and Moore Creek is 20,000m³. The maximum quantity of water that may be diverted during the duration of the authorization for the Kitimat River is 365,000m³.
5. On any stream, no diversion is permitted where stream discharge is less than 55 l/s, or where the diversion will cause the stream discharge to fall below 55 l/s. No diversion is permitted where stream (wetted) depth is less than 0.30 metres (12 inches) at the withdrawal location, or where the diversion will cause the stream (wetted) depth to fall below 0.30 metres (12 inches) at the withdrawal location.
6. On any lake, water withdrawal must cease if drawdown exceeds 0.10 metres (relative to the water level documented at the commencement of withdrawal activities). In the event that drawdown exceeds 0.10 metres, withdrawals may resume only when water levels have risen above the 0.10 metres drawdown level.
7. No water will be diverted or removed from any beaver pond.
8. Approval has been granted to use the water from November 27, 2015 to November 26, 2017.
9. This approval does not authorize any instream work.

10. A copy of this approval must be available for inspection at the tank truck and associated construction locations.
11. End-of-pipe intakes must contain a screen with a mesh size that does not exceed one tenth of an inch.
12. The holder of this approval must maintain accurate records of all water withdrawal activities throughout the term of this permit. A digital spreadsheet has been sent to the applicant's email provided on the application. Water withdrawal records for each diversion point, including "0" values for months where no water was withdrawn, must be recorded monthly on the digital spreadsheet provided. The spreadsheet must be submitted to the Oil and Gas Commission on a quarterly basis to OGCWater.VolumeData@bcogc.ca. Quarterly reports are due on or before April 25th, July 25th, October 25th, and January 25th. Do not modify the digital spreadsheet as it is designed to be interpreted by Commission software. If a cell/field in the spreadsheet is not relevant to the permitted activity, leave it blank.
13. In times of drought, the Commission may suspend short term water use previously authorized when there is risk to other resources that may result from the withdrawal of water. Water use suspensions may remain in place until such time as the Commission is satisfied that there is sufficient water in the applicable water body or water course to permit the short term use of the amount specified in the approval.
14. The holder of this approval must monitor stream discharge at a location near the point of diversion in a manner consistent with the British Columbia Hydrometric Standards (https://www.for.gov.bc.ca/hts/risc/pubs/aquatic/hydrometric/man_BC_hydrometric_stand_V1.0.pdf) immediately before and during water withdrawal activities, and must maintain records of the stream discharge monitoring.

Additional Conditions:

1. For POD #1a (UTM Zone 9 location N. 5986860, E. 519491) and #1b (UTM Zone 9 location N. 5986740, E. 519564), water withdrawals are not authorized for the months of July and August.
2. For POD #2a (UTM Zone 9 location N. 5985833, E. 520147) and #2b (UTM Zone 9 location N. 5985602, E. 520209), water withdrawals are only authorized for the months of May, June, October and November.
3. For POD #3 (UTM Zone 9 location N. 5984852, E. 520223), water withdrawals are not authorized for the month of August.

The attached plan(s) form an integral part of this authorization.

Ashley Istead
Natural Resource Officer

A handwritten signature in black ink, appearing to read 'A. Istead', with a large, sweeping flourish extending to the left.

cc: Jason Loree, Worley Parsons
cc: OGC File: 9642948
cc: Haisla Nation

Application for Short Term Use of Water - Supplemental Table

Applicant:

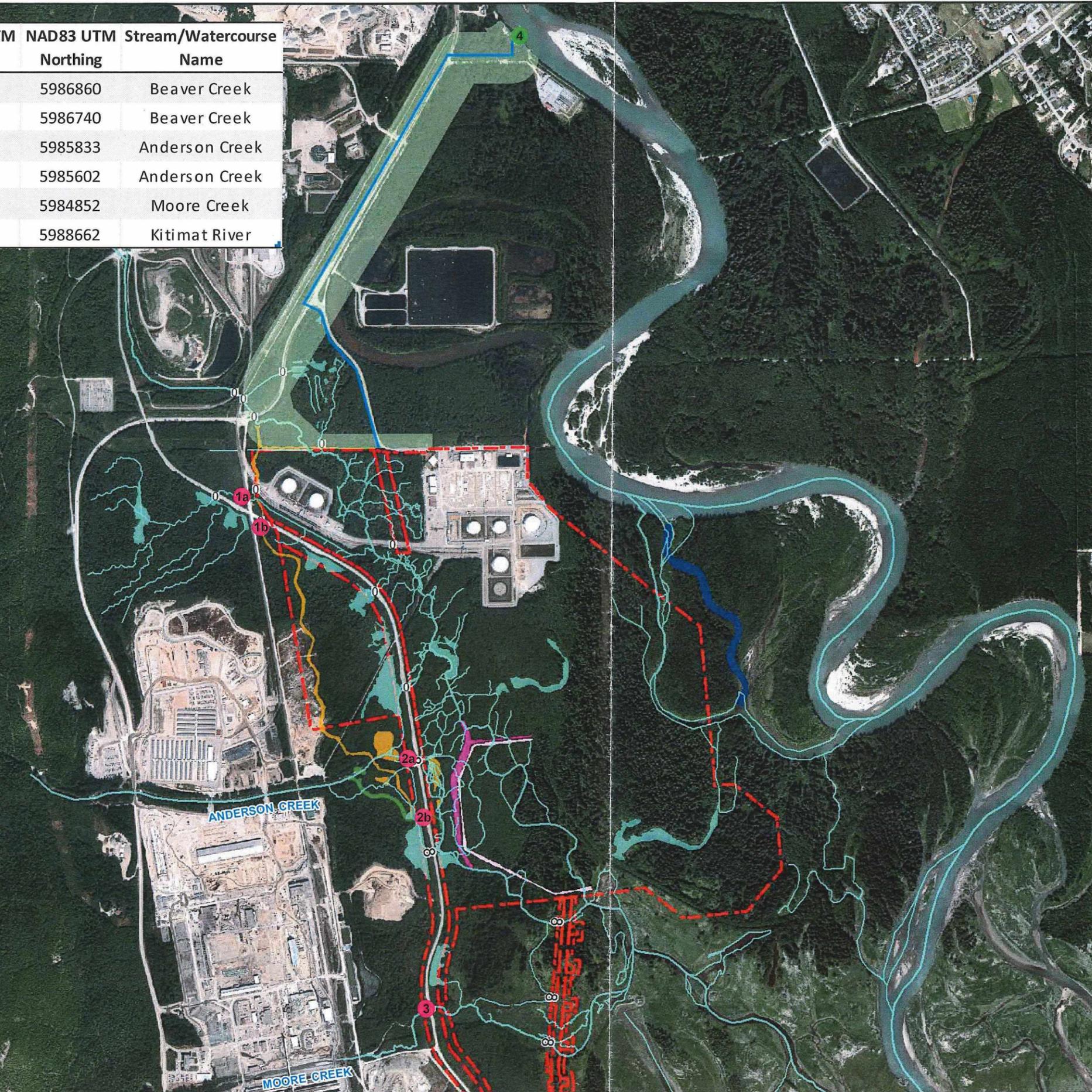
OGC File #

this section applies to all applications									this section applies only to rivers / streams				this section applies only to lakes		this section applies only to water source dugouts or water storage sites						
PODR	UTM Zone	Northing	Easting	Purpose	Source Type	Source Name	proposed volume/day (m3)	proposed total volume (m3)	Wetted Stream Width (metres)	Stream Depth (metres)	Velocity (m/s)	Date Measurements Were Taken DAY MONTH YEAR			Surface Area in Hectares	If Surface Area is less than 5 hectares, provide average depth	Dugout Length (m)	Dugout Width (m)	Dugout Depth (m)	Dugout Volume (m3)	Land Tenure associated with dugout/storage site
1a	9	5986860	519491	Other	Stream/River	Beaver Creek (1a)	190	20000	10.96	0.16	0.23										
1b	9	5986740	519564	Other	Stream/River	Beaver Creek (1b)	190	20000	11.32	0.22	0.28										
2a	9	5985833	520147	Other	Stream/River	Anderson Creek (2a)	190	20000	24.07	0.32	0.56	16	May	2013							
2b	9	5985602	520209	Other	Stream/River	Anderson Creek (2b)	190	20000	26.56	0.26	0.32										
3	9	5984852	520223	Other	Stream/River	Moore Creek (3)	190	20000	19	1.4	2.35	30	Jan	2015							
4	9	5986662	520572	Other	Stream/River	Kitimat River (4)	500	365000	27	5.4	1.00										
7																					
8																					
9																					
10																					

9642948

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Intake #	UTM Zone	NAD83 UTM Easting	NAD83 UTM Northing	Stream/Watercourse Name
1a	9	519491	5986860	Beaver Creek
1b	9	519564	5986740	Beaver Creek
2a	9	520147	5985833	Anderson Creek
2b	9	520209	5985602	Anderson Creek
3	9	520223	5984852	Moore Creek
4	9	520572	5988662	Kitimat River



Legend

- Existing Water Intake
- Proposed Water Intake
- 8 Bridge
- 0 Culvert
- Facility Boundary as Identified in OGC Facility Permit Application
- Mainstream Aquatic Habitat
- Off-Channel Aquatic Habitat
- Wetland/Pond
- Certified Water Supply Corridor
- Existing Water Intake Pipeline
- Kitimat Side Channel Diversion
- Phase 1 Beaver Creek Realignment
- Phase 1 Beaver Creek Realignment Berm
- Phase 2 Beaver Creek Realignment
- Anderson Creek Realignment

Notes:
 1. Existing Bridges & Culverts, Streams and Wetland/Pond data provided by Triton (ground-truthed in 2014).



REV. NO.	DESCRIPTION	BY	CHKD	APVD	APVD	DATE
B	ISSUED FOR OGC APPROVAL	AK	JL	JL		04/08/15
A	INITIAL DRAFT	AK				04/06/15

REVISIONS

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LNG CANADA PROJECT

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TITLE: **LNG CANADA EXPORT TERMINAL**
SECTION 8 SHORT TERM WATER USE
PROPOSED INTAKE LOCATIONS & INFRASTRUCTURE

UNIT:	KITIMAT		PLANT:	
FIG No.:	1	SIZE	B	REV.
				B

GEOMATICS DRAWING NUMBER: 04-007-001_REV B

9642948