

June 30, 2023

LNG Canada Development Inc.
400 - 4th Avenue SW
Calgary, AB T2P 0J4

Attention: LNG Canada Development Inc.

RE: Amendment to Application Determination Number 100113251

Permit holder: LNG Canada Development Inc.
Amendment Date of Issuance: June 30, 2023
Amendment Effective Date: June 30, 2023
Application Submission Date: June 29, 2023
Amendment Application Number: 100118293
Approved Disturbance Footprint: 0 ha

Amendment Details

Changes In and About a Stream: 0006900	Amendment to add additional Stream Impact Locations to Change Approval AD#100113251 issued July 12, 2021
---	--

General Permissions, Authorizations and Conditions

Authorizations

Water Sustainability Act

1. The BC Energy Regulator, under section 26(1) of the *Water Sustainability Act*, hereby grants an amendment to the above referenced permit, as detailed in the Amendment Details table below, subject to the original permit, any subsequent amendments and any additional or revised conditions as set out herein.

Conditions

Clearing/Forest Act

2. The permit holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the activity area that are considered to be a safety hazard according to Workers Compensation Act regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the activity area without causing damage to standing timber may be harvested.

Water Course Crossings and Works

3. Stream, lake, and wetland crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.
4. Construction or maintenance activities within a fish bearing stream or wetland must occur:

- a. during the applicable reduced risk work windows as specified in the Skeena Region - Reduced Risk Window;
- b. in accordance with alternative timing and associated mitigation recommended in a plan prepared by a qualified professional and accepted by the BC Energy Regulator; or
- c. in accordance with an authorization or letter of advice from Fisheries and Oceans Canada that is provided to the BC Energy Regulator;

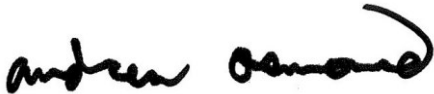
If activities are to occur in accordance with b or c above, the documentation must be submitted to the BC Energy Regulator at postpermitrequests@bc-er.ca prior to commencement of activities.

5. At any time, the BC Energy Regulator may suspend instream works authorized under this permit. Suspensions on instream works will remain in place until such time as the BC Energy Regulator notifies permit holders that works may resume. Reasons for suspension of works may include, but are not limited to, drought conditions and increased environmental or public safety risks.
6. Equipment used for activities under this Permit must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity.

Advisory Guidance

1. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Environmental Protection and Management Regulation under the *Oil and Gas Activities Act*.

All pages included in this permit and any attached documents form an integral part of this permit.



Andrew Osmond
Authorized Signatory
BC Energy Regulator Delegated Decision Maker

Copied to:

First Nations – Haisla Nation Council

June 12, 2023

LNG Canada Development Inc.
400 - 4th Avenue SW
Calgary, AB T2P 0J4

Attention: LNG Canada Development Inc.

RE: Amendment to Application Determination Number 100113251

Permit holder: LNG Canada Development Inc.
Amendment Date of Issuance: June 12, 2023
Amendment Effective Date: June 12, 2023
Application Submission Date: May 29, 2023
Amendment Application Number: 100117945
Approved Disturbance Footprint: 0 ha

Amendment Details

Changes In and About a Stream: 0006900	Maintenance and upgrade works to the Anderson Creek realignment channel and associated habitat offsets.
---	---

General Permissions, Authorizations and Conditions

Authorizations

Water Sustainability Act

1. The BC Energy Regulator, under section 26(1) of the *Water Sustainability Act*, hereby grants an amendment to the above referenced permit, as detailed in the Amendment Details table below, subject to the original permit, any subsequent amendments and any additional or revised conditions as set out herein.

Conditions

Notification

2. A notice of construction start must be submitted, as per the relevant BC Energy Regulator process at the time of submission, at least 48 hours prior to the commencement of activities under this permit.
3. The Permit Holder must notify the First Nation(s) copied on this permit/authorization at least 5 (five) working days prior to project commencement.

Clearing/Forest Act

4. The permit holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the activity area that are considered to be a safety hazard according to Workers Compensation Act regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the activity area without causing damage to standing timber may be harvested.

Water Course Crossings and Works

5. Stream, lake, and wetland crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.
6. Construction or maintenance activities within a fish bearing stream or wetland must occur:
 - a. during the applicable reduced risk work windows as specified in the Skeena Region - Reduced Risk Window;
 - b. in accordance with alternative timing and associated mitigation recommended in a plan prepared by a qualified professional and accepted by the BC Energy Regulator; or
 - c. in accordance with an authorization or letter of advice from Fisheries and Oceans Canada that is provided to the BC Energy Regulator;

If activities are to occur in accordance with b or c above, the documentation must be submitted to the BC Energy Regulator at postpermitrequests@bc-er.ca prior to commencement of activities.

7. At any time, the BC Energy Regulator may suspend instream works authorized under this permit. Suspensions on instream works will remain in place until such time as the BC Energy Regulator notifies permit holders that works may resume. Reasons for suspension of works may include, but are not limited to, drought conditions and increased environmental or public safety risks.
8. Equipment used for activities under this Permit must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity.
9. Open cut crossings and works within streams, lakes or wetlands must be planned and conducted in accordance with the following requirements:
 - a. an open cut of a stream classified as S1, S2, S3 or S4 must not occur, unless the stream is frozen to its bed or is completely dry with no evidence of subsurface flow;
 - b. impacted Riparian Management Areas of an open cut of a stream must be restored, to the extent practicable, by re-vegetating any exposed soil on the Riparian Management Areas using seed or vegetative propagules of an ecologically suitable species that
 - i. promote the restoration of the wildlife habitat that existed on the area before the construction was initiated, and
 - ii. stabilize the soil if it is highly susceptible to erosion;
 - c. unless otherwise authorized by Fisheries and Oceans Canada, spawning gravels must not be disturbed when redds that contain eggs or alevins are present. The authorization must be provided to the BC Energy Regulator; and
 - d. channels, banks, and beds of streams, including any disturbed stable natural material must be restored, to the extent practicable, to the structure and conditions that existed before the crossing construction was initiated.
10. Flow isolation crossings and works must be planned and conducted in accordance with the condition above regarding open cut crossings, and the following additional requirements:
 - a. construction of the crossing or works, including the location and operation of any equipment, must be isolated from water flowing in the stream;
 - b. water from flumes, pump-arounds, diversions, or other methods must be released to downstream areas in a manner that avoids erosion or sediment release;
 - c. pump intakes must not disturb beds of fish bearing streams, except as necessary to ensure safe installation and operation of equipment, and must be screened with maximum mesh sizes and approach velocities in accordance with the Fisheries and Oceans Canada 'Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater'; and

- d. water flows downstream of in-stream construction sites must be maintained at volume and discharge consistent with upstream flows.
11. Mechanical stream crossings must be constructed, maintained, and deactivated according to the following requirements, as applicable:
- a. To facilitate construction of a crossing, a machine is permitted to ford the stream a maximum of one time in each direction at the crossing location.
 - b. Only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings;
 - c. The permit holder must ensure that permanent bridges are designed and fabricated in compliance with:
 - i. the Canadian Standards Association Canadian Bridge Design Code, CAN/CSA-S6; and
 - ii. soil property standards, as they apply to bridge piers and abutments; set out in the Canadian Foundation of Engineering Manual.
 - d. Except with leave of the BC Energy Regulator, the permit holder must ensure that
 - i. culverts are designed and fabricated in compliance with the applicable:
 - a) Canadian Standards Association CSA G401, Corrugated Steel Pipe Products; or
 - b) Canadian Standards Association Standard CSA B1800, Section B182.8, Plastic Non-pressure Pipe Compendium; or
 - ii. any pipe installed in lieu of a culvert is of at least equivalent standard and strength as any culvert as specified above.
 - e. Except with leave of the BC Energy Regulator, the permit holder must ensure that bridges or culverts meet the criteria set out in i., ii. or iii. below:
 - i. the bridge or culvert is designed to pass the highest peak flow of the stream that can reasonably be expected within the return periods set out in Column 2 of the table below for the period the permit holder anticipates the structure will remain on site, as set out in Column 1 of the table below:

Anticipated period crossing structure will remain on site	Peak flow period
Bridge or culvert, 3 years or less	10 years
Bridge other than a bridge within a community watershed, more than 3 years but less than 15	50 years
Bridge within a community watershed, more than 3 years	100 years
Bridge, 15 years or more	100 years
Culvert, more than 3 years	100 years

 - ii. the bridge, or any component of the bridge:
 - a) is designed to pass expected flows during the period the bridge is anticipated to remain on the site;
 - b) is constructed, installed and used only in a period of low flow; and
 - c) is removed before any period of high flow begins.
 - iii. the culvert;
 - a) is a temporary installation, and the permit holder does not expect to subsequently install a replacement culvert at that location;
 - b) is not installed in a stream, when the stream contains fish;
 - c) is sufficient to pass flows that occur during the period the culvert remains on the site;
 - d) is installed during a period of low flow; and
 - e) is removed before any period of high flow begins.
 - f. Snow fills must consist of clean snow and may only be located on streams that are dry or frozen to the bottom during the period of construction, maintenance, and use. Where periodic thaws are anticipated, the permit holder must ensure measures are in place that allows meltwater to pass through, ensure movement

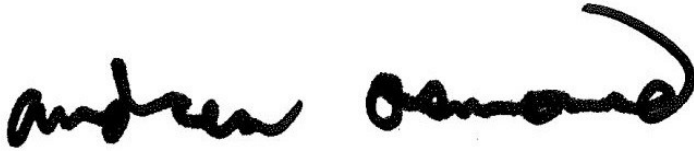
of fish is not impeded, and prevent pooling on the upstream side of the snow fill. Snow fill and any installed culverts must be removed prior to spring snow melt;

- g. Ice bridges on fish bearing streams may only be constructed where sufficient water depth and stream flows prevent the bridge structure from coming in contact with the stream bottom;
- h. Water applied to construct an ice bridge on a water body must be sourced in accordance with the *Water Sustainability Act* unless
 - i. the water body is a stream with a stream channel width of at least 5 meters and is not designated as a sensitive stream under the *Fish Protection Act*, or has a riparian class of W1, W3, or L1;
 - ii. the water is sourced from the same water body proximal to the location on which the ice bridge is constructed;
 - iii. the water body is not within the boundaries of a public park;
 - iv. pump intakes must not disturb beds of fish bearing streams, lakes or wetlands except as necessary to ensure safe installation and operation of equipment, and must be screened with maximum mesh sizes and approach velocities in accordance with the Fisheries and Oceans Canada 'Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater', and
 - a) where the water body is a stream, the flow of water in the stream at the time and location of pumping exceeds 60 litres per second and the instantaneous pumping rate does not exceed 1% of the water flowing in the water body at the time and location the pumping occurs, or
 - b) where the water body is a lake or pond, the cumulative volume of water withdrawn does not exceed 10 cm of lake or pond depth, calculated as the product of lake or pond surface area x 10 cm;
 - v. records of water withdrawal and corresponding streamflow measurements are maintained by the permit holder and provided to the BC Energy Regulator upon request.
- i. Bridge or culvert abutments, footings and associated scour protection must be located outside the natural stream channel and must not constrict the channel width.
- j. Wetland crossings must be constructed, maintained, and removed in accordance with the following:
 - i. organic cover within and adjacent to the wetland must be retained;
 - ii. minimize erosion or release of sediment within the wetland;
 - iii. any padding materials must be placed on the wetland surface only and must not be used for infilling;
 - iv. any padding materials must be removed as soon as practicable following construction, considering weather and ground conditions; and
 - v. the wetland, including banks and bed, must be restored, to the extent practicable, to the condition that existed before the crossing was initiated.

Advisory Guidance

1. CIAS Sketch Plan - LNGC_100113251_SP_R3.pdf is for the permit holder's internal reference only and was not reviewed as a decision tool for this permit, nor does it form an integral part of this permit.
2. Instructions for submitting notice of construction start, as required by regulation, can be found in the Oil and Gas Activity Operations Manual on the BC Energy Regulator's website.
3. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Environmental Protection and Management Regulation under the Oil and Gas Activities Act.

All pages included in this permit and any attached documents form an integral part of this permit.

A handwritten signature in black ink, appearing to read "Andrew Osmond", with a long, sweeping flourish at the end.

Andrew Osmond
Authorized Signatory
BC Energy Regulator Delegated Decision Maker

Copied to:
First Nations – Haisla Nation Council

July 25, 2022

LNG Canada Development Inc.
400 - 4th Avenue SW
Calgary, AB T2P 0J4

Attention: LNG Canada Development Inc.

RE: Amendment to Application Determination Number 100113251

Permit Holder: LNG Canada Development Inc.

Amendment Date of Issuance: July 25, 2022

Amendment Effective Date: July 25, 2022

Application Submission Date: June 10, 2022

Amendment Application Number: 100116086

AMENDMENT DETAILS

Changes In and About a Stream: 0006900

GENERAL AUTHORIZATIONS AND CONDITIONS

Water Sustainability Act

1. The BC Oil and Gas Commission (the "Commission"), under section 26(1) of the *Water Sustainability Act*, hereby grants an amendment to the above referenced Application Determination Number permit, as detailed in the Amendment Details table, above, subject to the original permit, any subsequent amendments and any additional or revised conditions as set out herein.
2. The authorizations granted under this permit are limited to the area identified in the spatial data submitted to the Commission in the permit application as identified and dated above; herein referred to as the 'activity area'.

CONDITIONS

Notification

3. A notice of construction start must be submitted, as per the relevant Commission process at the time of submission, at least 48 hours prior to the commencement of activities under this permit.
4. The Permit Holder must notify the First Nation(s) copied on this permit/authorization at least 5 (five) working days prior to project commencement.

Clearing

5. The permit holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the activity area that are considered to be a safety hazard according to Workers Compensation Act regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the activity area without causing damage to standing timber may be harvested.

Water Course Crossings and Works

6. Stream, lake and wetland crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.
7. Construction or maintenance activities within a fish bearing stream or wetland must occur:
 - a. during the applicable reduced risk work windows as specified in the Skeena Region - Reduced Risk Work Windows;
 - b. in accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the Commission; or
 - c. in accordance with an authorization or letter of advice from Fisheries and Oceans Canada that is provided to the Commission;

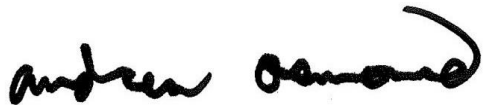
If activities are to occur in accordance with b or c above, the documentation must be submitted to the Commission prior to commencement of activities.

8. At any time, the Commission may suspend instream works authorized under this permit. Suspensions on instream works will remain in place until such time as the Commission notifies permit holders that works may resume. Reasons for suspension of works may include, but are not limited to, drought conditions and increased environmental or public safety risks.
9. Equipment used for activities under this Permit must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity.
10. Following initial sediment removal, the permit holder is authorized to conduct further sediment removal for the purpose of maintaining stream function and fish habitat in Anderson creek channel

ADVISORY GUIDANCE

1. CIAS Sketch Plan - LNGC_100113251_SP_R2.pdf, Construction Plan - L001-00000-CX-4024-2208_R0.pdf is for the permit holder's internal reference only and was not reviewed as a decision tool for this permit, nor does it form an integral part of this permit.
2. Instructions for submitting notice of construction start, as required by regulation, can be found in the Oil and Gas Activity Operations Manual on the Commission's website.
3. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Environmental Protection and Management Regulation under the Oil and Gas Activities Act.

All pages included in this permit and any attached documents form an integral part of this permit.



Andrew Osmond
Authorized Signatory
Commission Delegated Decision Maker

Copied to:

First Nations – Haisla Nation Council

July 12, 2021

LNG Canada Development Inc.
400 - 4th Avenue SW
Calgary, AB T2P 0J4

Attention: LNG Canada Development Inc.

RE: Determination of Application Number 100113251

Permit Holder: LNG Canada Development Inc.
Date of Issuance: July 12, 2021
Effective Date: July 12, 2021
Application Submission Date: May 28, 2021
Application Determination Number: 100113251

ACTIVITIES APPROVED

Changes In and About a Stream: 0006900

GENERAL AUTHORIZATIONS AND CONDITIONS

Water Sustainability Act

1. The Commission, pursuant to section 11 of the *Water Sustainability Act*, authorizes the Changes In and About a Stream, as detailed in the table above, within the activity area for construction and maintenance activities, unless otherwise restricted by this authorization:
 - a) Instream works must be carried out in accordance with the methods and any mitigations, as specified in the application.
2. The authorizations granted under this permit are limited to the area identified in the spatial data submitted to the Commission in the permit application as identified and dated above; herein referred to as the 'activity area'.

CONDITIONS

Notification

3. A notice of construction start must be submitted, as per the relevant Commission process at the time of submission, at least 48 hours prior to the commencement of activities under this permit.
4. The Permit Holder must notify the First Nation(s) copied on this permit/authorization at least 5 (five) working days prior to project commencement.

Clearing

5. The permit holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the activity area that are considered to be a safety hazard according to Workers Compensation Act regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the activity area without causing damage to standing timber may be harvested.

Water Course Crossings and Works

6. Stream, lake and wetland crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.
7. Construction or maintenance activities within a fish bearing stream or wetland must occur:
 - a. during the applicable reduced risk work windows as specified in the Skeena Region – Reduced Risk Work Windows;
 - b. in accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the Commission; or
 - c. in accordance with an authorization or letter of advice from Fisheries and Oceans Canada that is provided to the Commission;

If activities are to occur in accordance with b or c above, the documentation must be submitted to the Commission prior to commencement of activities.

8. At any time, the Commission may suspend instream works authorized under this permit. Suspensions on instream works will remain in place until such time as the Commission notifies permit holders that works may resume. Reasons for suspension of works may include, but are not limited to, drought conditions and increased environmental or public safety risks.
9. Equipment used for activities under this Permit must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity.
10. Following initial sediment removal, the permit holder is authorized to conduct further sediment removal for the purpose of maintaining stream function and fish habitat in Anderson creek channel.

ADVISORY GUIDANCE

1. CIAS Sketch Plan - LNGC_100113251_SP_R1.pdf, Construction Plan - Preliminary Plans, Profiles & Details_NHC_14May2021.pdf is for the permit holder's internal reference only and was not reviewed as a decision tool for this permit, nor does it form an integral part of this permit.
2. Instructions for submitting notice of construction start, as required by regulation, can be found in the Oil and Gas Activity Operations Manual on the Commission's website.
3. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Environmental Protection and Management Regulation under the *Oil and Gas Activities Act*.

All pages included in this permit and any attached documents form an integral part of this permit.



Rebecca Bromba
Authorized Signatory
Commission Delegated Decision Maker

Copied to:

First Nations – Haisla Nation Council