April 8, 2026

Woodfibre LNG General Partner Inc.
900, 1185 W. Georgia
Vancouver, BC V6E 4E6

Attention: Woodfibre LNG General Partner Inc.

RE: Amendment of Application Determination Number 100105360

Permit holder: Woodfibre LNG General Partner Inc.
Amendment Date of Issuance: April 8, 2026
Amendment Effective Date: April 8, 2026
Application Submission Date: September 04, 2024
Amendment Application Number: 100118517
Approved Disturbance Footprint: 0.0 ha

Amendment Details

Facility Identification No.: 00026917 **Facility Name:** WLNG_GP SQUAMISH A-001-K/092-G-11 001	Revise conditions 15b,15e, and 25 to reflect modification of facility H2S limit, permissible sound levels, permitted on-site deisel storage volume, and permitted on-site condensate volume.

General Permissions, Authorizations and Conditions

Permissions

Energy Resource Activities Act

1. The BC Energy Regulator, under section 31(7) of the *Energy Resource Activities Act*, hereby grants an amendment to the permit issued for the above referenced Application Determination Number, any associated authorizations subject to the original permit, any subsequent amendments and any additional or revised conditions as set out herein, as per the Amendment Details table above and, if required, as detailed in the Technical Specification Details and/or Activity Details table(s) below

Facility Conditions

Condition 15 and and 25 of the permit issued on July 2, 2019 under AD#100105360 are replaced by the conditions identified below:

15. The LNG facility must not exceed any of the following:
    a. a maximum inlet gas rate of 9,344 e3m3/day;
    b. a maximum inlet gas H_2S concentration of 5 ppm;

c. a maximum of one LNG train;

d. a maximum of two converted Moss type LNG carriers each with five containers for LNG storage;

e. the following maximum specific storage limits:

Stored Substance	Maximum Storage Container Quantity and Capacity
LNG	10 x 25,000 m3
Ethane Refrigerant	5 x 20 m3
Propane Refrigerant	10 x 20 m3
Mixed Refrigerant	0 x 0 m3
Condendsate	1 x 1,500 m3
Diesel	Aggregate limit of 40 m3

or,

f. a maximum of one LNG carrier berth.

25. Within two years of completing commissioning, the Permit Holder must submit via email to postpermitrequests@bc-er.ca, referencing AD#100105360, to the BC Energy Regulator's satisfaction, a noise survey that:

a. includes data measurement and an assessment of whether the LNG facility noise emissions meet permissible sound levels,

b. has been conducted during the summer months and at maximum operating conditions; or

i. with leave of the BC Energy Regulator, been conducted at steady state during the summer months, with an additional survey conducted at maximum operating conditions once that level of operation has commenced.

c. assesses the extent to which the following permissible noise levels are met:

Receptor	Universal Transverse Mercator Coordinates (Zone 10 NAD 83)		Permissible Sound Level	
	Easting (m)	Northing (m)	Day	Night
Receptor 1	-	-	-	-
Receptor 2	480052	5501652	55.1 dBA	50.0 dBA
Receptor 3	481201	5499533	52.1 dBA	46.9 dBA
Receptor 4	483768	5502412	53.2 dBA	50.0 dBA
Receptor 5	483808	5499400	51.0 dBA	45.3 dBA

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

Shannon Weatherill
Authorized Signatory
BC Energy Regulator Delegated Decision Maker

Copied to:
First Nations – Squamish Nation, Musqueam Indian Band,Tsleil-Waututh Nation

BRITISH COLUMBIA ENERGY REGULATOR

eSubmission TANC Application Number: 245

June 27, 2023

Woodfibre LNG General Partner Inc.
900, 1185 W. Georgia
Vancouver, BC
V6E 4E6

RE: APPROVED APPLICATION TO TRANSFER ACTIVITIES AND AUTHORIZATIONS FROM PACIFIC CANBRIAM ENERGY LIMITED TO WOODFIBRE LNG GENERAL PARTNER INC.

Pursuant to Section 29 of the Oil and Gas Activities Act, I hereby grant the transfer of the activities and authorizations, as outlined on Application number 245. Transfer fees are to be made through the online payment portal, AMS Payment.

We have reviewed the surface assignment schedule and tenure file numbers details outlined in the document. Our review focused only on the tenure numbers and did not confirm the remaining details of the document.

Advisory Guidance

1. The transferee is responsible for any outstanding site deficiencies, including reclamation and documentation.
2. The transferee is responsible for any outstanding Post Construction Plans, As-Built submissions, Survey Plans, non-compliances and/or any submissions required by the British Columbia Energy Regulator.
3. It is the responsibility of the transferee to ensure all records, reports, plans, permits and other correspondence pertaining to the assets outlined in the attached documents are obtained from the transferor. The emergency response plans for these activities must be received by the Commission from the transferee, upon approval.
4. It is the responsibility of the transferee to register the Assignment of Surface Rights with the Land Title & Survey Authority, if applicable.
5. Cutting permits are not transferable. Any activity where the forest cut information was not submitted to the British Columbia Energy Regulator prior to the transfer the new permit holder must apply for a stand-alone cutting permit under the existing Application Determination (AD) Number via the Application Management System (AMS).

Please do not hesitate to contact me via e-mail at Jody.Sutherland@bc-er.ca if you have any questions.

Yours truly,

Jody Sutherland
Senior Advisor

ASSIGNMENT OF SURFACE RIGHTS

LICENCE OF OCCUPATION: NO. 958957 (FILE NO. 9000628)

THIS AGREEMENT made as of the 26th day of June, 2023.

BETWEEN:

Pacific Canbriam Energy Limited, an Alberta corporation with a business office located at Suite 2100 – 215 2 St SW, Calgary Alberta (hereinafter referred to as "Assignor")

- and -

Woodfibre LNG General Partner Inc., an Alberta corporation registered in British Columbia with a business office located at Suite 900 – 1185 W. Georgia Street, Vancouver British Columbia (hereinafter referred to as "Assignee")

WHEREAS the Assignor is a licensee of a British Columbia Licence of Occupation (hereinafter called the "Licence of Occupation") more particularly described on Schedule "A" attached hereto, and

WHEREAS the Assignor has agreed to assign all of its right in the Licence of Occupation to the Assignee.

NOW THEREFORE THIS INDENTURE WITNESSETH, that in consideration of the sum of One ($1.00) Dollar and other valuable consideration, receipt of which is hereby acknowledged by the Assignor, the Assignor hereby assigns all of its right, title, estate and interest in and to the Licence of Occupation to the Assignee.

The Assignor covenants that it has good right, full power and absolute authority to assign the tenures covered by the Licence of Occupation but does not purport to convey and shall not warrant any better title to the tenures hereby assigned than it now has or is entitled to receive.

The Assignee hereby accepts the assignment and agrees with the Assignor that from and after the Effective Date it shall at all times be bound by, observe, and perform all duties and obligations to be observed and performed by the Assignor under the Licence of Occupation.

The Assignor shall continue to remain liable and indemnify the Assignee from and against any liability, loss, costs, claims or damages arising out of any matter or thing relating to the Licence of Occupation occurring or arising prior to the effective date, and the Assignee shall indemnify the Assignor from and against similar liability, loss, costs, claims or damages arising subsequent to the effect date.

The effective date of this agreement shall be the 29th day of November, 2022.

The Address and the British Columbia Registration number of the Assignor is:

Pacific Canbriam Energy Ltd.
Suite 2100 – 215 2 St SW
Calgary, Alberta
T2P 1M4
Registration No. A0126909.

The Address and the British Columbia Registration number of the Assignee is:

Woodfibre LNG General Partner Inc.
Suite 900 – 1185 W. Georgia St.
Vancouver, B.C., V6E 4E6
Registration. No. A0125267.

This agreement may be executed in one or more counterparts and delivered by electronic transmission, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF the parties hereto have caused these presents to be executed as of the day and year first written above.

ASSIGNOR Ronald Bailey, Director Pacific Canbriam Energy Ltd.	ASSIGNEE Ronald Bailey, Director Woodfibre LNG General Partner Inc.

Surface Assignment Schedule

Schedule "A"

Attached to and forming part of the Assignment of Licence of Occupation dated the 26th day of June, 2023, effective the 29th day of November, 2022 between Pacific Canbriam Energy Ltd, (Assignor) and Woodfibre LNG General Partner Inc. (Assignee).

Tenure File	Licence No.	AD #	Tenure Type
9000628	958957	100105360	Licence of Occupation

BRITISH COLUMBIA ENERGY REGULATOR

May 11, 2023

Pacific Canbriam Energy Limited
2100, 215 – 2nd Street SW
Calgary, AB. T2P 1M4

Attention: Pacific Canbriam Energy Limited

RE: Amendment of Application Determination Number 100105360

Permit holder: Woodfibre LNG Limited
Amendment Date of Issuance: May 11, 2023
Amendment Effective Date: May 11, 2023
Application Submission Date: February 16, 2023
Amendment Application Number: 100113160

Amendment Details

Facility Identification No.: 00026917 **Facility Name:** PACIFIC CANBRIAM Squamish A-001-K/092-G-11 001	To update facility conditions 15 and 25

General Permissions, Authorizations and Conditions

Permissions

Oil and Gas Activities Act

1. The BC Energy Regulator (the "Regulator"), under section 31(7) of the *Oil and Gas Activities Act*, hereby grants an amendment to the permit issued for the above referenced Application Determination Number, any associated authorizations subject to the original permit, any subsequent amendments and any additional or revised conditions as set out herein, as per the Amendment Details table above and, if required, as detailed in the Technical Specification Details and/or Activity Details table(s) below.

Facility Conditions

Condition 15 and and 25 of the permit issued on July 2, 2019 under AD#100105360 are replaced by the conditions identified below:

15. The LNG facility must not exceed any of the following:
    a. a maximum inlet gas rate of 9,344 e3m3/day;
    b. a maximum inlet gas H_2S concentration of 3 ppm;
    c. a maximum of one LNG train;
    d. a maximum of two converted Moss type LNG carriers each with five containers for LNG storage;
    e. the following maximum specific storage limits:

Stored Substance	Maximum Storage Container Quantity and Capacity
LNG	10 x 25,000 m3
Ethane Refrigerant	5 x 20 m3
Propane Refrigerant	10 x 20 m3
Mixed Refrigerant	0 x 0 m3
Condendsate	1 x 35 m3
Diesel	1 x 7 m3

or,

f. a maximum of one LNG carrier berth.

25. Within two years of completing commissioning, the Permit Holder must submit via email to postpermitrequests@bc-er.ca, referencing AD#100105360, to the BC Energy Regulator's satisfaction, a noise survey that:

    a. includes data measurement and an assessment of whether the LNG facility noise emissions meet permissible sound levels,

    b. has been conducted during the summer months and at maximum operating conditions; or

        i. with leave of the BC Energy Regulator, been conducted at steady state during the summer months, with an additional survey conducted at maximum operating conditions once that level of operation has commenced.

    c. assesses the extent to which the following permissible noise levels are met:

Receptor	Universal Transverse Mercator Coordinates (Zone 10 NAD 83)		Permissible Sound Level	
	Easting (m)	Northing (m)	Day	Night
Receptor 1	-	-	-	-
Receptor 2	480052	5501652	50 dBA	40 dBA
Receptor 3	481201	5499533	50 dBA	40 dBA
Receptor 4	483768	5502412	50 dBA	40 dBA
Receptor 5	483808	5499400	55 dBA	45 dBA

Advisory Guidance

1. The location of noise monitoring equipment is to be as close as practicable to the locations identified in the facility permit. In the event that the specific location requires adjustment due to access, safety, equipment configuration, or other reasons, the Permit Holder may locate the equipment within a 75-meter radius of the target location assuming that the acoustic environments are expected to be comparable.

2. Under the authority of the *Environmental Management Act* a discharge permit must be in place/amended prior to the leave to open of the subject application.

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

_____

Justin Anderson
Authorized Signatory
BC Energy Regulator Delegated Decision Maker

Copied to:
Squamish Nation, Musqueam Indian Band, Tsleil-Waututh Nation

BRITISH COLUMBIA ENERGY REGULATOR

eSubmission TANC Application Number: 227

April 11, 2023

Pacific Canbriam Energy Limited
2100, 215-2nd Street, SW
Calgary, AB
T2P 1M4

RE: APPROVED CORPORATE AMALGAMATION APPLICATION FROM WOODFIBRE LNG LIMITED TO PACIFIC CANBRIAM ENERGY LIMITED.

Pursuant to Section 29 of the Oil and Gas Activities Act, the Corporate Amalgamation from **Woodfibre LNG Limited to Pacific Canbriam Energy Limited** has been approved and is effective March 31, 2023 as per the requested Amalgamation Established date.

The activities and authorizations, as outlined on Application number 227, have been recorded in the name of Pacific Canbriam Energy Limited, endorsed by the Amalgamation certificate dated March 17, 2023. Fees are to be paid through the online payment portal, AMS Payment.

Advisory Guidance

1. The transferee is responsible for any outstanding site deficiencies, including reclamation and documentation.
2. The transferee is responsible for any outstanding Post Construction Plans, As-Built submissions, Survey Plans, Non-compliances and/or any submissions required by the Oil and Gas Commission.

Please do not hesitate to contact Jody.Sutherland@bc-er.ca if you have any questions.

Yours truly,

Jody Sutherland
Senior Advisor

November 10, 2020

Woodfibre LNG Limited
1020, 1075 West Georgia Street
Vancouver, BC V6E 3C9

Attention: Woodfibre LNG Limited

Re: Correction of Application Determination Number 100105360

Permit Holder: Woodfibre LNG Limited
Date of Issuance: July 2, 2019
Date of Correction: November 10, 2020
Application Determination Number: 100105360

The BC Oil and Gas Commission hereby corrects the permit identified and dated above as follows:

- Condition 3(b) is removed from the permit.

The Permit Holder must comply with any permissions, authorizations, approvals and conditions set out in the original permit, any subsequent amendments to the permit and any additional corrections as set out herein.

This letter forms an integral part of your permit and should be attached thereto.

James O'Hanley
Authorized Signatory
Commission Delegated Decision Maker

Copied to: Roy Northern Land Service Ltd.
Squamish Nation, Musqueam Indian Band, Tsleil-Waututh Nation

July 2, 2019

Woodfibre LNG Limited
1020, 1075 West Georgia Street
Vancouver, BC V6E 3C9

Attention: Woodfibre LNG Limited

RE: Application Determination Number 100105360

Permit Holder: Woodfibre LNG Limited
Date of Issuance: July 2, 2019
Effective Date: July 2, 2019
Application Submission Date: April 3, 2019
Application Number: 100105360
Approved Disturbance Footprint: 108.063 ha

ACTIVITIES APPROVED

Facility Identification No.: 00026917	**Facility Name:** WOOD Squamish A-001-K/92-G-11 001
Changes In and About a Stream: 0005102	

GENERAL PERMISSIONS, AUTHORIZATIONS and CONDITIONS

PERMISSIONS

Oil and Gas Activities Act

1. The BC Oil and Gas Commission, under section 25 (1) of the *Oil and Gas Activities Act*, hereby permits the Permit Holder referenced above, to construct, maintain and operate a facility (the LNG Facility), subject to the conditions contained herein, any applicable exemptions and authorizations.
2. The permissions and 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 after referred to as the 'activity area'.

AUTHORIZATIONS

Land Act

3. The Commission, pursuant to section 39 of the *Land Act*, hereby authorizes the occupation and use of any Crown land located within the activity area.

a) A licence authorized under section 39 of the *Land Act* for the Crown land portion of this application will follow. The Permit Holder is subject to the conditions contained in the Licence.

b) The authorization to occupy and use Crown land under the Licence expires two years from the date of issuance, unless construction has commenced, or this permit is otherwise extended, suspended, cancelled, surrendered or declared spent.

c) The authorization to occupy and use Crown land does not entitle the Permit Holder to exclusive possession of the activity area.

CONDITIONS

Notification

4. At least 5 (five) working days prior to the commencement of construction, the Permit Holder must provide a notice of works to the District of Squamish and any First Nation(s) who may have Aboriginal Interests identified, as per the B.C. First Nations Consultative Areas Database, within the area in which the works are to occur.

5. Within 60 days of the completion of construction activities under this permit, the Permit Holder must submit to the Commission a post-construction plan as a shapefile and PDF plan accurately identifying the location of the total area actually disturbed under this permit. The shapefile and plan must be submitted via eSubmission.

Clearing

6. 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

7. Stream crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.

8. In-stream activities within a fish bearing stream, lake or wetland must occur:

    a. during the applicable reduced risk work windows as specified in the Region 2 Lower Mainland - Reduced Risk Timing Windows for Fish and Wildlife; or

    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.

9. 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.

10. Equipment used for activities under this Permit must not be situated in a stream channel unless it is dry at the time of the activity.

Archaeology

11. Prior to the commencement of construction activities the permit holder must:

    a. complete an archaeological assessment for the portion of the activity area located northwest of UTM 481409E 5502112N as shown on document 180836OV2_Figure1_20k.pdf, dated September 12, 2018, in accordance with applicable requirements of the *Heritage Conservation Act*; and

    b. complete and submit to the Commission an acceptable report on the results of the assessment.

12. If the report *required* under the condition above recommends any further assessment work on an area, the permit holder must not begin construction activities on that area until further assessment is completed.

13. If an artifact, feature, material or thing protected under the *Heritage Conservation Act* is identified *within* the activity area, the permit holder must, unless the permit holder holds a permit under section 12.4 of the *Heritage Conservation Act* issued by the Commission in respect of that artifact, feature, material or thing:

    a) immediately cease all work in the vicinity of the artifacts, features, materials or things;

b) immediately notify the Commission; and

c) resume work in the vicinity of the artifacts, features, materials or things in accordance with an appropriate mitigation plan, if required, that has been accepted by the Commission.

ACTIVITY SPECIFIC DETAILS PERMISSIONS, and CONDITIONS

FACILITIES

Land Area Number: 100010115

TECHNICAL SPECIFICATION DETAILS

Facility ID: 00026917	**Facility Name:** WOOD Squamish A-001-K/092-G-11 001
Facility Type: LNG Facility **Equipment:** Flare Stack **Equipment:** Facility Storage	**Location:** A-001-K/092-G-11 **Equipment:** Incinerator

Technical Facility Permissions

14. Subject to the conditions contained herein, the Permit Holder may flare gas from the two flares, identified as "High Pressure Flare Stack" and "Low Pressure Flare Stack" in OGC Facility Permit Application Project Description: Appendix D – Flare Basis of Design rev A, 31 October 2016 for the following purposes:
    a. flare pilots;
    b. flare system purge;
    c. LNG carrier loading for a cumulative period of less than one hour per vessel;
    d. process upsets; and
    e. commissioning and start-up.

Facility Conditions

15. The LNG facility must not exceed any of the following:
    a. a maximum inlet gas rate of 8,172 e3m3/day;
    b. a maximum inlet gas H_2S concentration of 3 ppm;
    c. a maximum of one LNG train;
    d. a maximum of two converted Moss type LNG carriers each with five containers for LNG storage;
    e. the following maximum specific storage limits:

Stored Substance	Maximum Storage Container Capacity
LNG	10 x 25,000 m3,
Ethane Refrigerant	20 m3,
Butane Refrigerant	20 m3,
Mixed Refrigerant	0 m3,
Condensate	35 m3,
Diesel	7 m3

    or,

    f. a maximum of one LNG carrier berth.

16. The LNG Facility must include a thermal oxidizer sized to manage continuous combustion of waste gas.

17. The Permit Holder must not undertake commissioning, start up, or operation of the LNG facility until it has submitted via email to postpermitrequests@bcogc.ca, referencing AD#100105360, a Flaring Notification Plan to the satisfaction of the Commission. The Flaring Notification Plan will include:
    a. notification processes specific to
        (i) flaring during commissioning; and
        (ii) flaring during operations; and
    b. notification to the public, District of Squamish, Squamish Nation, Musqueam Indian Band, and Tsleil-Waututh Nation regarding flaring events.
18. The Permit Holder must notify the public, District of Squamish, Squamish Nation, Musqueam Indian Band, and Tsleil-Waututh Nation at least 24 hours before a planned flaring event or within 24 hours of the start of an unplanned flaring event if the quantity of gas exceeds 10,000 m3 per event or the duration exceeds 4 hours. This notification must be conducted in accordance with the relevant detail in the Flaring Notification Plan referenced in condition 17 above.
19. The Permit Holder must ensure that emissions from the flares and thermal oxidizer do not:
    a. create a hazard to public health or safety;
    b. result in off-lease odours; or
    c. result in injury to vegetation or wildlife.
20. Subject to section 18(3) of the Liquefied Natural Gas Facility Regulation (LNGFR), the Permit Holder must design, maintain and operate flares and thermal oxidizer so that flaring, other than flaring for emergency purposes, does not result in:
    a. the emission of black smoke during normal operations; or
    b. the emission of black smoke during process upsets that exceed a period or periods aggregating more than 15 minutes in any two hour period.
21. The Permit Holder must not undertake installation of flare and thermal oxidizer equipment at the site until it has submitted via email to postpermitrequests@bcogc.ca, referencing AD#100105360, to the satisfaction of the Commission, a Flaring Management Report that documents:
    a. measures to design, construct and operate the LNG facility to minimize flaring of gas including, but not limited to, flaring during LNG carrier loading; and
    b. associated emissions including, but not limited to, black smoke during commissioning.
22. The Flaring Management Report must be submitted to the Commission at least 18 months prior to commencement of commissioning, subject to any applicable written exemptions.
23. The Permit Holder must implement the measures set out in the Flaring Management Report.
24. The Permit Holder must not undertake construction of the LNG facility until it has submitted via email to postpermitrequests@bcogc.ca, referencing AD#100105360, to the satisfaction of the Commission, an updated ambient noise model including a new baseline survey.
25. Within two years of completing commissioning, the Permit Holder must submit via email to postpermitrequests@bcogc.ca, referencing AD#100105360, to the Commission's satisfaction, a noise survey that:
    a. includes data measurement and an assessment of whether the LNG facility noise emissions meet permissible sound levels:
    b. has been conducted during the summer months and at maximum operating conditions; or
        (i) with leave of the Commission, been conducted at steady state during the summer months, with an additional survey conducted at maximum operating conditions once that level of operation has commenced.
    c. assesses the extent to which the following permissible noise levels are met:

Receptor	Universal Transverse Mercator Coordinates (Zone 10 NAD 83)		Permissible Sound Level	
	Easting	Northing	Day	Night
Receptor 1	481596 m	5503699 m	50 dBA	40 dBA
Receptor 2	479713 m	5501487 m	50 dBA	40 dBA
Receptor 3	481184 m	5499137 m	50 dBA	40 dBA
Receptor 4	483779 m	5502444 m	50 dBA	40 dBA
Receptor 5	484372 m	5500071 m	55 dBA	45 dBA

26. On request of the Commission, the Permit Holder must submit, to the satisfaction of the Commission, via email to postpermitrequests@bcogc.ca, referencing AD#100105360, noise surveys or additional assessments at any time in response to noise complaints, LNG facility changes, or any other reason. If the LNG facility noise emissions exceed the permissible sound levels listed in condition 25 above, the Permit Holder must complete, to the satisfaction of the Commission, a Noise Management Plan.

27. The Permit Holder must comply with the applicable requirements set out in the “Measurement Guideline for Upstream Oil and Gas Operations”, as amended from time to time.

28. The Permit Holder must submit the notice required under section 3(1)(g) of the LNGFR in writing to ogcpipelines.facilities@bcogc.ca, referencing AD#100105360, and by submitting a “Notice of Construction Start” form through KERMIT.

29. The Permit Holder must select, install and maintain a lighting design that conforms to the Guide on the Limitation of the Effects of Obtrusive Light from Outdoor Lighting Installations, Commission Internationale de l’Eclairage (CNC/CIE) 150:2017, as amended from time to time.

30. The Permit Holder must not undertake any construction of the LNG facility, other than site preparation work, until it has submitted via email to postpermitrequests@bcogc.ca, referencing AD#100105360, to the satisfaction of the Commission:

    a. an updated quantitative risk assessment with sufficient technical detail to demonstrate compliance with Clause 14 of CSA Z276, that includes the following:

        (i) a detailed frequency assessment that describes the data sources used in the analysis, parts counts, and all assumptions applied;

        (ii) a detailed assessment of the frequency and consequences of LNG carrier loading incidents, including loading arm failures due to ship movement, and the potential for failure of the loading arm emergency shutdown systems;

        (iii) presentation of figures with a consistent background image that clearly shows the graphical scale, major elements of the facility plot plan, water line, and relevant local features;

        (iv) as input to the quantitative risk assessment, a detailed study of the floating storage concept with a full range of potential failure modes and their frequencies for each potential event that results in a loss of containment, including earthquakes, tsunamis, landslides, impact by an LNG carrier or other vessel, leaks that lead to vessel or structural failure, mooring failure, fatigue, or mechanical failure due to the existing service history; and

        (v) a report demonstrating that the risks are As Low As Reasonably Practicable (ALARP) and not intolerable for the operational phase;

    b. an engineering assessment demonstrating compliance with Section 4(2) of the LNG Facility Regulation and LNG facility permit conditions 33 and 34;

    c. a tsunami hazard study report for the LNG facility site, that includes the following:

i. consideration of published probabilistic tsunami hazard results for Georgia Strait in relation to the LNG facility site;

ii. a target hazard levels for the local landslide generated tsunami of 100-year, 475-year and 1000-year events; and

iii. modeling of specific landslide tsunamis with the expected wave heights at the LNG facility site;

d. updated geotechnical and seismic studies, including an annotated list, signed and sealed by a qualified professional, demonstrating how the assumptions and recommendations included in the geotechnical and seismic studies submitted with the application have been addressed in the updated studies;

e. a detailed evaluation and reporting of the liquefaction potential of onshore and offshore soils, that includes the following:

i. use of a recognized and generally accepted case history-based method;

ii. consideration of the shear wave velocity results for the site in liquefaction evaluation; and

iii. use of the Becker Penetration Test methodology for gravelly soil;

f. detailed documentation of how the available offshore geophysical data was considered in the liquefaction and other design evaluations;

g. an operating phase drainage control plan, including design, operation and maintenance requirements;

h. an updated flooding assessment report for the LNG facility site; and

i. debris flow and debris flood hazard assessment for Mill Creek and Woodfibre Creek watersheds, including peak discharge estimates, sediment concentration estimates, and recommended debris flow mitigation measures such as diversion and catchment structures.

31. The Permit Holder must not undertake commissioning or operation of the LNG facility until it has submitted via email to postpermitrequests@bcogc.ca, referencing AD#100105360, to the satisfaction of the Commission:

a. a plan for implementation of a marine safety zone within all marine portions of the activity area at all times;

b. documentation verifying that the required Safety Integrity Levels were achieved;

c. an updated quantitative risk assessment with sufficient technical detail to demonstrate compliance with Clause 14 of CSA Z276, that includes the following:

i. a detailed frequency assessment that describes the data sources used in the analysis, parts counts, and all assumptions applied;

ii. a detailed assessment of the frequency and consequences of LNG carrier loading incidents, including loading arm failures due to ship movement, and the potential for failure of the loading arm emergency shutdown systems;

iii. presentation of figures with a consistent background image that clearly shows the graphical scale, major elements of the facility plot plan, water line, and relevant local features;

iv. as input to the quantitative risk assessment, a detailed study of the floating storage concept with a full range of potential failure modes and their frequencies for each potential event that results in a loss of containment, including earthquakes, tsunamis, landslides, impact by an LNG carrier or other vessel, leaks that lead to vessel or structural failure, mooring failure, fatigue, or mechanical failure due to the existing service history;

v. a report demonstrating that the risks are As Low As Reasonably Practicable (ALARP) and not intolerable for the operational phase; and

d. confirmation that the Henriette Lake Dam (Water licence F126618) has sufficiently addressed the recommendations and conclusions from the 2010 seismic assessment completed by Sandwell Engineering.

32. The Permit Holder must implement a marine safety zone in accordance with the plan submitted via email to postpermitrequests@bcogc.ca, referencing AD#100105360, to the satisfaction of the Commission, pursuant to condition 31(a) above.
33. The Permit Holder must design the marine structures associated with the LNG facility in accordance with Canadian Standards Association (CSA) document EXP276.1, "Design requirements for marine structures associated with LNG facilities", and must construct and maintain those marine structures in accordance with the design.
34. The Permit Holder must design the floating storage and offloading units associated with the LNG facility in accordance with Canadian Standards Association (CSA) document EXP276.2, "Design requirements for near-shoreline floating liquefied natural gas (FLNG) facilities", and must construct and maintain those floating storage and offloading units in accordance with the design.
35. The Permit Holder must maintain classification and verification requirements under a recognized member of the International Association of Classification Societies (IACS) that is a recognized organization by Transport Canada with rules for floating liquefied natural gas, to the satisfaction of the Commission, for the floating storage and offloading units associated with the LNG facility.

ADVISORY GUIDANCE

1. Construction Plan 2113-2609-00 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. Appropriate tenure may be issued upon acceptance of the post-construction plan. Submission of the original application and submission of the post-construction plan is considered an application for all subsequent applicable *Land Act* tenures. Upon the Commission's acceptance of the post-construction plan, no further applications for replacement tenure are required.
4. To obtain a Lease, under s.38 of the *Land Act*, over the activity area or any portion thereof, the Permit Holder may complete a boundary survey plan in the form of a District Lot Plan. Subject to review and approval, the applicable tenure may be issued.
5. While the permissible sound levels at the receptors listed above will be considered in noise surveys and assessments, the Commission recognizes that LNG facility construction and maintenance, as well as other development not under the control of the Permit Holder may change the acoustic environment and therefore, the permissible sound levels.

DEFINITIONS

For the purposes of interpreting this permit:

Marine safety zone is defined as an area surrounding marine infrastructure where a Permit Holder would limit access during operations in the interest of public safety.

For the purposes of interpreting the portions of this permit that pertain to flaring:

Commissioning means the period of time commencing when operations begin in accordance with section 11 of the LNGFR and ending when the first cargo of LNG is shipped.

Normal operations excludes emergency conditions and commissioning.

Emergency conditions involve activation of facility safety systems that could lead to emergency flaring. Emergency flaring occurs when safety controls within the LNG facility are enacted to depressurize equipment to avoid possible injury or property loss resulting from explosion, fire or catastrophic equipment failure.

Process upset means deviations that require operator to take measures that prevent safety or production loss and preempt activation of safety systems. Process upset excludes safety systems activation.

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

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Mayka Kennedy, P.Eng., C.Dir.
Chief Engineer
Commission Delegated Decision Maker

Copied to: Roy Northern Land Service Ltd.
MoFLNRO
Squamish Nation, Musqueam Indian Band, Tsleil-Waututh Nation
District of Squamish
BC Environmental Assessment Office
WorkSafe BC