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To	Impact Assessment Agency of Canada
From	Lara Taylor, Cedar LNG Partners (GP) Ltd.
Date	July 4, 2024
Subject	Decision Statement Condition 8.2 - Acoustic Follow-up Program
Document No.	PC21258A-EV-MEM-00003
Revision	0

Introduction

Cedar LNG Partners LP, by its general partner Cedar LNG Partners (GP) Ltd. (Cedar), a Haisla Nation led partnership with Pembina Pipeline Corporation (Pembina), is planning to construct and operate a liquefied natural gas (LNG) export facility within the District of Kitimat, British Columbia (BC) (the Project). The Project is subject to the requirements of the provincial *Environmental Assessment Act* and federal *Impact Assessment Act* and underwent a substituted environmental assessment from 2019 to 2023. Cedar received Environmental Assessment Certificate #E23-01 from the Environmental Assessment Office on March 13, 2023 and a positive Decision Statement under the *Impact Assessment Act* on March 15, 2023.

The Decision Statement issued under the *Impact Assessment Act* includes conditions of approval that Cedar must address. Condition 8.2 requires Cedar to develop and implement a follow-up program with respect to adverse federal effects on the health, social and economic conditions of Indigenous peoples from changes to the acoustic environment. This memorandum outlines Cedar's approach to meeting the requirements of this condition.

Condition 8.2.1: Noise Monitoring

Condition 8.2.1 of the Decision Statement requires that Cedar:

“monitor, during the year prior to construction and continuing through the first three years of operation (for three to five days each year during summer, when weather conditions do not interfere with sound monitoring), sound levels at the sensitive noise receptors identified during the development of the follow-up program;”

Noise levels from LNG facilities in British Columbia are regulated by the British Columbia Energy Regulator (BCER) through the *Energy Resource Activities Act* and associated Liquefied Natural Gas Facilities Regulation. In July 2023 the BCER issued Cedar a permit for the LNG facility that included noise monitoring requirements at two locations, one in Kitimaat Village and the other near the



Bish Forest Service Road (FSR) 1.5 km south of the facility. To align the requirements of the BCER permit and Condition 8.2 of the Decision Statement, Cedar proposes to complete the monitoring the two receptors specified in the permit plus a third location in Kitamaat Village.

Receptors 1 (R1) and 2 (R2) are the two locations specified in Condition 40e of the BCER Permit (BCER 20232; Figure 1). BCER Permit Condition 41 indicates that Cedar may locate the noise survey equipment in any acoustically comparable location within a 75-meter radius of the target locations in the table identified above in Condition 40e. This 75-metre variation in location will be applied to all monitoring locations.

R1 is a residence in Kitamaat Village, and R2 is a site 1.5 km south of Cedar’s floating LNG facility adjacent to the Bish Creek FSR (Figure 1). Due to safety along the FSR (e.g., pull out areas only) and physical constraints near the residence, the monitoring location cannot be located at the exact UTM locations specified in the BCER Permit Condition. However, the proposed monitoring locations are within the 75 m threshold from the Permit Condition locations. Receptor 3 (R3) is proposed to be located adjacent to the Gya Wa Tlaab Healing Centre Society, a noise sensitive receptor location close to the coastline in the Kitamaat Village. The three proposed noise monitoring locations are presented in Table 1. Figure 1 shows the three locations.

Table 1 Noise Monitoring Locations

ID	Description	UTM				Deviation from BCER Location (m)
		BCER Permit Condition		Monitoring Location		
		Easting	Northing	Easting	Northing	
R1	Kitamaat Village Residence	522774	5979712	522795	5979727	26
R2	Bish Creek FSR 1.5 km Boundary ¹	519106	5978779	519124	5978846	69
R3	Gya Wa Tlaab Healing Centre Society	--	--	522871	5980870	--

Notes:

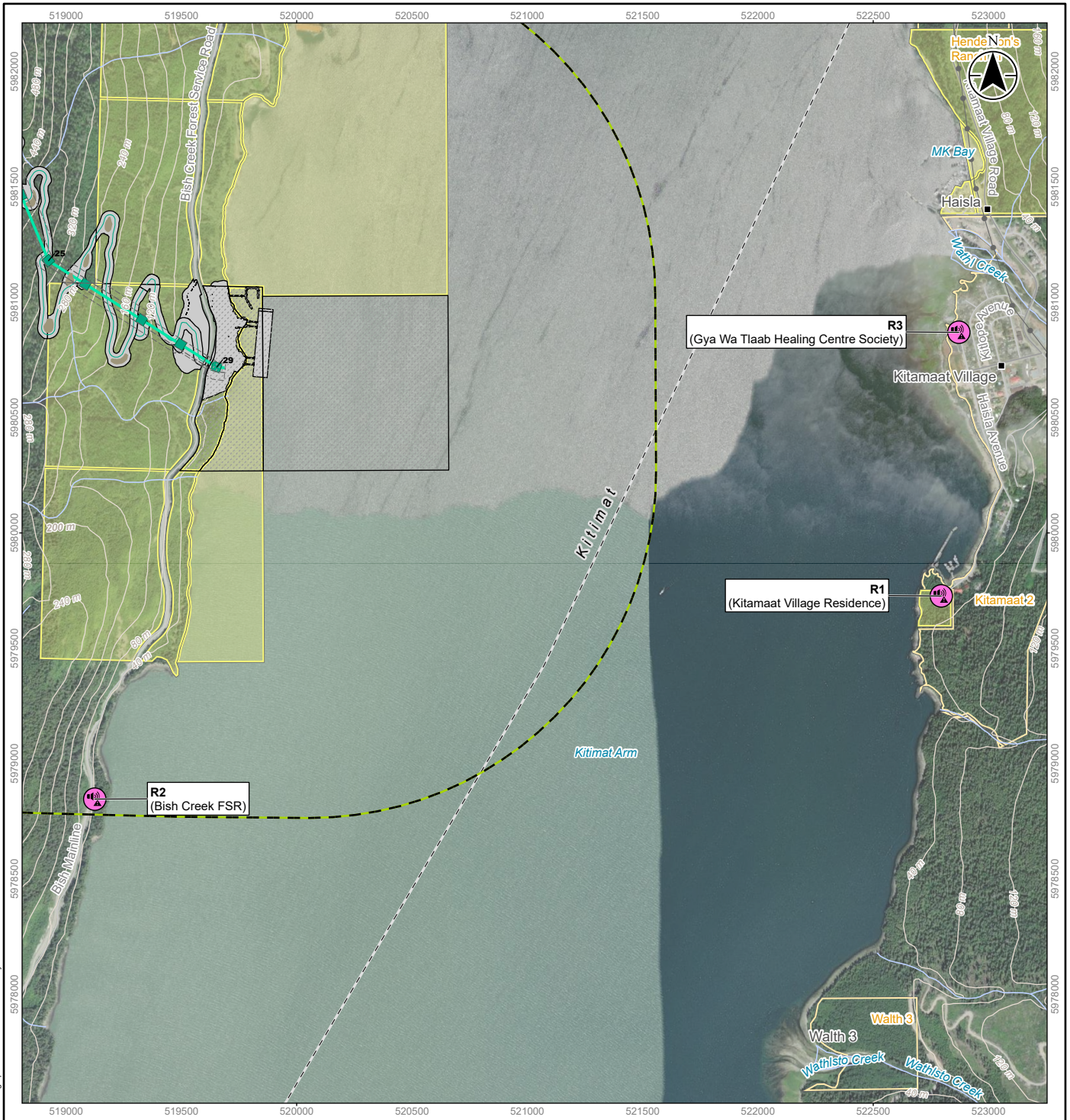
--“ not applicable

1. R2 is the same location as site “L1” assessed in Cedar’s Environmental Assessment Certificate Application

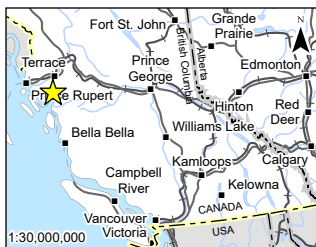
Noise monitoring will be completed once in August or September in each of:

- Pre-construction or a non-active period in the first year of construction
- A peak year of activity during construction (anticipated to be 2025 or 2026)
- Annually during the first three years of operation

August and September are the most suitable months for monitoring as weather conditions during this period are suitable for high levels of construction activity and typically does not generate high background noise levels thereby increasing the quality of the monitoring data.



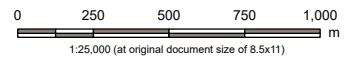
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Notes
 1. Coordinate System: NAD 1983 UTM Zone 9N
 2. Data Sources: DataBC, Government of British Columbia; Natural Resources Canada
 World Imagery: Earthstar Geographics
 World Imagery: Maxar

- Road
- Local Street
- - - Resource Road
- Transmission Line
- Topographic Contour
- Watercourse
- Municipal Boundary
- Land Ownership**
- Private Land
- First Nations Reserve

- ⊗ Noise Monitoring Location
- Transmission Line Alignment
- Access Road
- Tower Pad
- Spoil Pile
- Clearing Extent
- Terminal Area
- Transmission Line Right-of-Way
- Cedar LNG Criteria Boundary (1.5 km)



Project Location:
 128°40'46"W 53°58'N

Project Number: 123222994
 Prepared by LTRUDEL on 20230829
 Requested by LMCILLAN on 20230829

Client/Project/Report
 Cedar LNG Partners LP
 Cedar LNG Project

Figure No.

1

Title

Acoustic Monitoring Station

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

For each noise monitoring event, the overall duration will be five days. One sound level meter will be installed at each selected receptor location. All noise monitoring will be completed using integrating sound level meters meeting the ANSI S1.4 Type 1 (ANSI 1997) and the BCER noise guideline requirements (BCER 2021). One-minute equivalent A-weighted sound level ($L_{eq, 1min}$) and digital audio sound recordings of the measurement period will be recorded. In addition, weather conditions during the monitoring periods will be recorded by a portable weather meter. The sound level meter will be calibrated before and after each long-term measurement session. The calibrator meets the yearly recertification requirements in accordance with requirements as prescribed in the BCER noise guideline.

Condition 8.2.2 Comparison to Regulatory Standards

Cedar will prepare an annual report that outlines the approach that will be used for reporting the results of monitoring and comparisons to regulatory standards. The report will provide the following information:

- Monitoring setup and method
- Post-monitoring data analysis approach
- Daytime (7 AM to 10 PM) and nighttime (10 PM to 7 AM) equivalent sound level (L_{eq}) in A-weighted decibel level (dBA)
- Total number of valid measurement minutes and excluded minutes for the monitoring locations
- Daily time history graphs of measured noise levels versus time where exclusion of non-representative weather and activities occur
- Hourly, daytime, and nighttime sound level values calculated for the measurement period to establish the baseline sound level
- Comparison of results to permissible sound levels established in the BCER's *British Columbia Noise Control Best Practices Guideline* (Version 2.2, July 2021)
- Comparison to thresholds for percent highly annoyed and sleep disturbance (in terms of nighttime sound levels and maximum A-weighted sound levels) recommended in Health Canada's *Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise* (April 2017)
- Comparison to predicted noise levels in Cedar's Application for an Environmental Assessment Certificate

The annual report will compare measurement results to the applicable thresholds. If the results exceed the thresholds due to the Project, additional mitigation measures will be identified. These mitigations can be considered to reduce the Project noise levels in order to meet the thresholds specified in the BCER Permit or commitments made in the environmental assessment process.

In addition, the annual report will document any noise complaints, associated responses, and mitigation measures (if required) received as part of the community feedback protocol (Condition 9.1 of the Decision Statement). In the event of a noise-related public complaint, Cedar will attempt to reach a resolution with the complainant (on a case-by-case basis).

To investigate whether a noise-related public complaint is the result of Project-related noise, complaint-based noise monitoring may be conducted. If complaint-based noise monitoring is conducted, Cedar will strive to schedule the monitoring when environmental conditions are similar to the condition when the complaint was lodged (e.g., wind speed and direction, time of the year), consistent with complaint-based noise monitoring recommendations such as those published in BCER noise guideline.

Cedar will publish information related to any noise complaints in the annual report prepared in accordance with conditions 2.10 of the Decision Statement issued under the *Impact Assessment Act*. With respect to noise-related complaints, the annual report will include the following information (if applicable and available):

- The date and time of any complaint
- The approximate location of the complainant
- Any specific noise(s) that may have resulted in the complaint
- Climatic information at the time of the complaint (e.g., wind speed, wind direction, humidity, etc.)
- Response date
- Information on any monitoring conducted in response to the complaint
- Mitigation implemented or justification for not implementing mitigation (e.g., lack of technical feasibility)
- Outcome and resolution

The annual reports will be submitted to Haisla Nation and the Impact Assessment Agency of Canada by March 31 of the following year (as per condition 2.11 of the Decision Statement).



References

Acoustical Society of America. 1997. American National Standard (ANSI) ANSI S1.43 1997. Specifications for Integrating-Averaging Sound Level Meters. Reaffirmed by ANSI 16 March 2007. New York: ANSI.

BCER (British Columbia Energy Regulator). 2021. British Columbia Noise Control Best Practices Guideline. November 2021.

BCER 20232. General Permissions, Authorizations and Conditions Application Number 100115227 for Facility Cedar Kitimat B-076-J/103-H-15 001, BCER 100115227-PERMIT-LNG-FACILITY, July 6, 2023

Health Canada. 2017. Evaluating Human Health Impacts in Environmental Assessment: Noise, published by Health Canada. January 2017.

Environmental Assessment Act. 2023. Decision Statement Issued under Section 65 of the Impact Assessment. March 15, 2023.