

Mayall, Jane EAO:EX

From: Amanda Zinter <Amanda_Zinter@wlng.ca>
Sent: Thursday, July 31, 2014 11:55 AM
To: Smith, Alanya C EAO:EX; ltaylor@hemmera.com; Byng Giraud
Cc: Mayall, Jane EAO:EX
Subject: 30050-20/WLNG-15 RE: Project Shapefiles

Hi Alanya,

I will look into the request and get back to you asap. Very sorry for missing the call this am, Byng and I were in a meeting with Climate Action Secretariat that went over the allotted time. I spoke to Lara who has updated me and Byng will send you a separate update on FN today.

Thanks,

Amanda

From: Smith, Alanya C EAO:EX [mailto:Alanya.Smith@gov.bc.ca]
Sent: July-31-14 11:39 AM
To: Lara Taylor (ltaylor@hemmera.com); Byng Giraud; Amanda Zinter
Cc: Mayall, Jane EAO:EX
Subject: Project Shapefiles

Hello,

Would it be possible to provide us with shapefiles of the proposed Project (facility site and marine route) and a kmz (Google Earth file) to make available to the working group? This has been requested by Arch Branch to assess whether existing arch sites are documented the area.

Thank you,
Alanya

Alanya Smith |Project Assessment Manager| Environmental Assessment Office | Tel: (250) 387-2406 | BB: s.17
s.17 | Fax: (250) 387-2208

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Mayall, Jane EAO:EX

From: Lara Taylor <ltaylor@hemmera.com>
Sent: Monday, July 28, 2014 9:49 AM
To: Smith, Alanya C EAO:EX; 'Byng Giraud'; 'Amanda Zinter'
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: 30050-20/WLNG-15 RE: SCRD Comments re Woodfibre LNG Valued Components

Thank you Alanya. We will integrate the comments into our public comment tracking tables.

I have added the SCRD's letter to our folder for the next round of Working Group comments. Can you let me know whether you would prefer that we create a separate spreadsheet for tracking the second round of FN and WG comments or whether we should be adding onto the first round comments?

The dAIR and tracking table are on schedule for submission to the EAO this morning. We have one response in the tracking table that may not be available in time, but could be provided within the next day.

Lara

From: Smith, Alanya C EAO:EX [<mailto:Alanya.Smith@gov.bc.ca>]
Sent: Monday, July 28, 2014 9:33
To: 'Byng Giraud'; Lara Taylor; 'Amanda Zinter'
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: FW: SCRD Comments re Woodfibre LNG Valued Components

Good morning,

The formal public comment period for WLNG closed last night at midnight. We received about 500 comments over the weekend. Staff are working to post the new comments over the course of the week with the aim of having all posted by the end of this week.

Please see the attached letter and comments from SCRD and consider these comments as working group comments to address in the next round of review.

We anticipate receiving the working group tracking table and next draft AIR from you later today and I intend to send to the working group for their review.

If you have any questions, please give me a call.

Thank you,
 Alanya

Alanya Smith | Project Assessment Manager | Environmental Assessment Office | Tel: (250) 387-2406 | BB: s.17
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From: David Rafael [<mailto:David.Rafael@scrd.ca>]
Sent: Sunday, July 27, 2014 4:19 PM
To: Smith, Alanya C EAO:EX
Subject: SCRD Comments re Woodfibre LNG Valued Components

Hi Alanya

Please find attached the SCRD Board and staff comments regarding the Woodfibre LNG Valued Components.

Regards,
David

David Rafael
Senior Planner
Sunshine Coast Regional District
1975 Field Road, Sechelt, BC, V0N 3A1

phone: 604 885 6804 ext 4 (direct line)
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My office hours are Monday to Friday from 8:30 a.m. to 4:30 p.m.

Follow us on Twitter at [sunshinecoastrd](#)
Visit us: www.scrd.ca

Mayall, Jane EAO:EX

FILE COPY

From: Lara Taylor <ltaylor@hemmera.com>
Sent: Monday, July 21, 2014 5:03 PM
To: Paulson, Amber EAO:EX; Smith, Alanya C EAO:EX
Cc: 'Amanda Zinter (Amanda_Zinter@wlng.ca)'; 'Byng Giraud (byng_giraud@wlng.ca)'; Mayall, Jane EAO:EX
Subject: 30050-20/WLNG-15 Woodfibre LNG - First Nations Tracking Table
Attachments: 140721_WoodfibreLNG_FN_TrackingTable_EAO_v2.xlsx

Amber and Alanya,

Please find an updated version of the First Nations tracking table attached. This table has been updated with the two outstanding responses related to public health. From our perspective, this table is now complete. Please let us know if there are any comments that you believe require further information.

We are continuing to work on the Working Group tracking table with a target submission date of Monday morning (along with copies of the dAIR for distribution to the Working Group).

Thank you,
Lara

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Lara Taylor, MRM, P.Eng.
Project Manager



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Woodfibre LNG Project – Draft VC Selection/ Draft AIR Working Group Comment Tracking Table

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Comment ID#	Date Submitted	Submitter name and title	Agency/Affiliation	Comment relevant to draft VC selection or dAIR?	Relevant section and page number	Comment/ Issue Description/ Suggested Changes	Category/Theme	Change to the draft VC selection/ dAIR required?	Application Review and/or Permitting Requirement?	Proponent's Response	EAO's Assessment of Response
1	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		1. Tsleil-Waututh requests an assessment of the environmental impacts of both land-based and floating storage and offloading facilities for the Project.	Project Description	No		Since the Working Group meeting, WLNG has confirmed the project layout. The LNG facility will be located on land, and the floating storage and offloading unit will be located on water. This project description will be assessed as part of the environmental assessment certificate (EAC) application.	Resolved to EAO's satisfaction
2	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		2. From meetings with Woodfibre LNG (April 29, 2014) and the latest Advisory Working Group Meeting (May 12, 2014) for the Project, it is our understanding that the LNG storage facility is to be located on water. Tsleil-Waututh requests that the proponent provide the rationale behind this decision.	Project Description	No		The LNG storage facility will be located on water for two primary reasons. Firstly, constructing land-based LNG storage that meets the current building code seismic standards would be challenging. The water-based storage facility is able to better withstand seismic events. Secondly, decommissioning the facility at the end of its service period would have less environmental impact with water-based storage.	Resolved to EAO's satisfaction
3	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		3. Tsleil-Waututh requests clarification on the amount of land that will be used by the project: both disturbed (brownfield) and undisturbed (greenfield) land.	Project Description	No		The Project will primarily be located within areas that have already been cleared; however, some areas of additional clearing will be required. The areas where clearing is expected to be required include the natural gas pipeline from the metering station to the LNG facility and the stepdown transformers. This information will be confirmed in the Project Description section of the EAC Application and carried forward into the effects assessment as required. Section 5.11.3 of the dAIR states that Project effects that will be assessed include direct loss of native vegetation during Project construction. WLNG is currently calculating the areas anticipated to be cleared for the Project and will provide these areas to the Tsleil-Waututh Nation.	Unresolved: is not the entire footprint considered Brownfield? Please provide clarification.
4	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 2.2	4. In Section 2.2, under "The Application will provide the following" please add "Identification of First Nations whose territories the proposed Project is situated on."	Project Description	Yes		The following bullet has been added to Section 2.2 of the dAIR. Identification of the Aboriginal groups whose territories the Project is located within.	Resolved - change reflected in the dAIR
5	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 2.6	5. Under Section 2.6., Project Benefits, Tsleil-Waututh requests that economic benefits to First Nations are identified, including Aboriginal procurement, one of a number of mechanisms to ensure meaningful economic benefits are returned to local First Nations.	Project Benefits	Yes		The following changes have been made to the 2nd paragraph in Section 2.6 (changes in red text): The Proponent anticipates hiring qualified, competitive, local residents for its workforce from Squamish and the surrounding area, including local Aboriginal groups, where the appropriate skills are available. The Proponent will also consider economic benefits. Section 17 of the EAC Application will include Aboriginal interests, as identified by publicly available information and also by the views expressed by Aboriginal groups through the consultation process. Section 20 of the EA will summarize the issues and concerns raised, along with the proposed mitigation measures.	Unresolved - changes not reflected in the dAIR (June 23, 2014 Version), Page 18
6	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 17	6. Tsleil-Waututh seeks assurances that potential impacts to Aboriginal harvesting rights (e.g., hunting, fishing and gathering rights) be assessed as part of the project environmental evaluation that includes both specific sites and favoured species.	Aboriginal Interests	No		WLNG confirms that, where information is available, potential impacts to Aboriginal harvesting rights will be assessed as part of the environmental evaluation. Further information regarding how these effects will be considered is provided in Section 17 (Aboriginal Interests) of the dAIR.	Resolved to EAO's satisfaction
7	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 17	7. Since there is no separate pillar for "Aboriginal rights and title", will the concerns of Aboriginal groups be considered and made explicit under each Valued Component?	Aboriginal Interests	No		If information is available, each VC section of the EAC Application will describe how traditional knowledge and traditional use information, as obtained through consultation with Aboriginal groups and other sources, were used in the assessment. Where there is overlap between Aboriginal Interests and a VC, the information from other sections of the Application will be cross-referenced in Section 17 and summarized in the context of the specific Aboriginal group's Aboriginal interest.	Unresolved - the two statements are contradictory. Will Aboriginal Interests be considered in Part B under each VC, or will Aboriginal Interests that interact with potential effects on VCs be considered in Part 17?

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8	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5	8. We request there be an inventory of impacts on the following species: a. Ungulates b. Black bear c. Cougar d. Wolf	Assessment of Potential Environmental Effects (Mammals)	No	(a) The potential for ungulate populations to experience long-term project-related effects is considered negligible. Ungulates are not recommended for inclusion as a Project VC. 1) Potential to occur: Black-tailed deer are a common species in the Squamish Forest District and may occur within adjacent habitats. Elk have been introduced into the Clowhom drainage by MFLNRD. Elk also occur in nearby McNab drainage and may occur within adjacent habitats. 2) Potential to be affected: Consideration of Project design and siting (i.e., brownfield site) and consideration of species habitat association and habitat value based on current site conditions also suggest that ungulates will not be affected by Project development. Mitigation measures such as perimeter fencing will further reduce the potential for ungulate populations to be adversely affected by the Project.	Unresolved: please add examples of mitigation/project specifics that will reduce potential interactions, such as perimeter fencing etc. What project design and siting considerations specifically relate to ungulates/black bear/cougar/wolf? Brownfield site?
								No	(b) The potential for black bear populations to experience long-term project-related effects is considered negligible. Black bear is not recommended for inclusion as a Project VC. 1) Potential to occur: Black bear are a common species in the Squamish Forest District and may occur within adjacent habitats. 2) Potential to be affected: Current mitigation (perimeter fencing and management of wildlife-human conflict) was considered to assess potential Project-related effects to the species. Consideration of Project design and siting (i.e., brownfield site) and consideration of species habitat association and habitat value based on current site conditions suggest that black bear populations will not be affected by Project activities.	Unresolved: What project design and siting considerations specifically relate to ungulates/black bear/cougar/wolf? Brownfield site?
								No	(c) The potential for wolf populations to experience long-term project-related effects is considered negligible. Grey wolf is not recommended for inclusion as a Project VC. 1) Potential to occur: Wolves are a common species in the Squamish Forest District and may occur within adjacent habitats. 2) Potential to be affected: Current mitigation (perimeter fencing and management of wildlife-human conflict) was considered to assess potential project-related effects to the species. Consideration of Project design and siting (i.e., brownfield site) and consideration of species habitat association and habitat value based on current site conditions suggest that wolves will not be affected by Project activities.	Unresolved: What project design and siting considerations specifically relate to ungulates/black bear/cougar/wolf? Brownfield site?
								No	(d) The potential for cougar populations to experience long-term project-related effects is considered negligible. Cougar is not recommended for inclusion as a Project VC. 1) Potential to occur: Cougar are a common species in the Squamish Forest District and may occur within adjacent habitats. 2) Potential to be affected: Current mitigation (perimeter fencing and management of wildlife-human conflict) was considered to assess potential Project-related effects to the species. Consideration of Project design and siting (i.e., brownfield site) and consideration of species habitat association and habitat value based on current site conditions suggest that cougar will not be affected by Project activities.	Unresolved: What project design and siting considerations specifically relate to ungulates/black bear/cougar/wolf? Brownfield site?
9	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8	9. Tsleil-Waututh requests information on sewage discharge and whether the sewage treatment sites on the property will be included in the environmental assessment and/or remediation plans.	Marine Water Quality	No	Information on discharges to the marine environment will be included in the EAC application, including the potential effects associated with these discharges. Sewage discharge requirements will also be addressed during the permitting process. Applications will be submitted to the Oil and Gas Commission (OGC) for any required waste discharge permits (including air emissions, effluent discharges, and refuse disposal). Sewage discharge may also require permits from the District of Squamish and Vancouver Coastal Health. The site is being remediated by the current owner (Western Forest Products) and a Ministry of Environment Certificate of Compliance (CoC) will be obtained as a condition of purchase. Any mitigation or monitoring requirements of the CoC will be fulfilled by WLNG.	Unresolved: please identify that discharge will be also dealt with during permitting, include details of permitting requirements including responsible agency(ies).
10	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 7.3	10. Tsleil-Waututh requests an update on the status of Transport Canada's TERMPOL review process for this Project.	Marine Transport	No	A TERMPOL review will be conducted for the Project. WLNG has started discussions with Transport Canada. The TERMPOL assessment will be completed after the Project has submitted the EAC application.	Resolved to EAO's satisfaction

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11	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.9	11. Tsleil-Waututh requests more information on air emissions from the LNG facility and shipping activities (including both LNG tankers, escort tugs, and ferrying of employees) within the Regional Assessment Area for Atmospheric Environment.	Atmospheric Environment (Air Quality)	No		WLNG confirms that additional information on the potential effects on air quality from air emissions from the LNG facility and shipping activities will be provided in the EAC application.	Unresolved: include "air quality" in the response
12	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.9	12. Tsleil-Waututh requests that the Atmospheric Environment Assessment Areas include the Indian River Watershed and Indian Arm in the Local Assessment Area.	Atmospheric Environment (Air Quality)	No		The assessment areas for air quality encompasses the area where potential effects are expected to occur. If preliminary modelling indicates the extent of the effects is larger than the current assessment area, the assessment area may be expanded. Section 4.3.1.1 includes the following statements: "The anticipated boundaries for the assessment of the Project-related effects on each VC have been determined to encompass the physical scope of the environmental and socio-economic effects that could occur due to Project-related construction and operation activities (Tables 4-2 and 4-3). Additional rationale for the selection of the boundaries is included in Section 5.0 through Section 9.0 for each IC and VC. Should boundaries change during the course of preparation of the EA, a rationale for the change will be presented".	Unresolved: changes to the dAIR required. To reflect this commitment, please update section 5.2.1.1 to include the following statement: in the event that preliminary modeling indicates that the extent of effects may be larger than the 20km by 20 km LSA, the study area may be expanded to capture all areas where potential Project-related effects to air quality are expected to occur.
13	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.4	13. Tsleil-Waututh requests that channel geomorphology and potential impacts to creek geomorphology are included.	Geomorphology and Natural Hazards	No		WLNG does not anticipate effects to creek geomorphology would occur because the Project will only affect flows in Mill Creek over a short reach (~300 m).	Resolved to EAO's satisfaction
14	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.10	14. Tsleil-Waututh requests more information on how the GHG Valued Component will be assessed without definitive spatial boundaries.	GHG Management	No		The climate change assessment will include characterizing the historic and future climate, changes in future climate and how climate change may affect the Project Infrastructure. This work will focus on the same study area as the RAA for air quality. The climate change assessment will also consider how the Project will contribute to GHG emissions. This will be undertaken by quantifying GHG emissions associated with the Project and comparing to provincial and federal levels of GHG emissions.	
15	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 8.0	15. The Heritage Resources Valued Component should also include the cultural importance of lands, waters and resources, specifically culturally valued sites (e.g., spiritual sites, transformer sites, viewscapes) identified by First Nations in the Heritage Pillar.	Heritage Resources	No		WLNG confirms that, where available, the Heritage Resources VC will include information on the traditional knowledge and traditional use information. Where there is overlap between Aboriginal Interests and a VC, the information from other sections of the Application will be cross-referenced in Section 17 and summarized in the context of the specific Aboriginal group's Aboriginal Interest.	Resolved to EAO's satisfaction
16	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.19	16. Tsleil-Waututh is concerned about impacts to Southern Resident Killer Whales (SRKW) and other marine mammals as a result of the Project, and would like more information on the following: a. Increased marine traffic, and therefore vessel strikes, to marine mammals (including SRKW) b. Acoustic disturbance to marine mammals (including SRKW)	Marine Mammals	No		WLNG acknowledges the concern of the Tsleil-Waututh and confirms that potential effects to killer whales, including southern resident killer whales, and other marine mammals as a result of direct and indirect effects from Project activities will be assessed. WLNG confirms that the assessment for the Marine Mammals VC effects assessment will include increased marine traffic and acoustic disturbances.	Unresolved: Will the assessment include Southern Resident Killer Whales?
17	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 7.3	17. Tsleil-Waututh requests information on how the proponent plans to monitor the impacts from third party vessels (i.e., escort tugs) associated with the project.	Marine Transport	No		Additional information regarding the use of support vessels, including escort tugs, will be included in the EAC Application, including an assessment of these activities on the VCs. Vessels used for the Project will transit in accordance with the <i>Canada Shipping Act</i> (2001) and regulations established by Transport Canada and the Pacific Pilotage Authority. In addition, a description of monitoring programs that are anticipated to be required during Project construction and operation will be included in Section 13 of the EAC Application.	Unresolved: Include a statement related to the operation of vessels in accordance with federal legislation and TC regulations, including details of which laws and regulations would apply.

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18	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 7.3	18. Tsleil-Waututh is concerned about increased marine vessel traffic and requests more information on the underwater acoustic footprint of the following vessels on marine life: a. LNG tankers b. Escort tugs	Marine Transport	No		<p>WNLG confirms that information regarding the underwater noise expected to be associated with the Project will be provided in the EAC Application, including the underwater noise associated with shipping activities. This information will be carried forward into the relevant VC effects assessments, specifically Section 5.18 - Forage Fish and Other Fish and Section 5.19 Marine Mammals.</p> <p>Noise levels of LNG tankers and escort tugs will be characterized based on available information in the public domain / scientific literature, and this will be compared to known acoustic threshold criteria for toothed whales and baleen whales to assess the likelihood and consequence of potential underwater noise impacts on these receptors. Recommended mitigation measures to minimize effects of underwater noise on sensitive marine receptors will be provided as part of the environmental assessment.</p> <p>One measure to reduce underwater noise is to locate the LNG facility on land. As well, LNG carriers will be required to follow Pacific Pilotage Authority's speed requirements. Further mitigation measures for underwater noise will be identified in the EAC Application.</p>	Unresolved: Include a statement that details how underwater noise will be assessed through marine VC, and list sub-components that are applicable to this effect. Provide information on potential mitigation strategies to be employed to reduce underwater noise.
19	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8, Section 5.15, Section 5.18	19. Tsleil-Waututh requests that the Regional Assessment Areas for the Marine Water Quality, Freshwater Fish and Fish Habitat, and Forage Fish and Other Fish Study Assessment Areas be expanded to include First Narrows of Burrard Inlet and the western edge of Gower Point, approximately 4 km west of Gibsons.	Marine Water Quality, Freshwater Fish and Fish Habitat, Forage Fish and Other Fish	No		<p>The assessment areas for marine water quality, freshwater fish and fish habitat and forage fish and other fish encompass the area where potential effects are expected to occur. If the effects assessment indicates the extent of the effects is larger than the current assessment area, the assessment area may be expanded.</p> <p>Section 4.3.1.1 includes the following statement: "The anticipated boundaries for the assessment of the Project-related effects on each VC have been determined to encompass the physical scope of the environmental and socio-economic effects that could occur due to Project-related construction and operation activities (Tables 4-2 and 4-3). Additional rationale for the selection of the boundaries is included in Section 5.0 through Section 5.0 for each IC and VC. Should boundaries change during the course of preparation of the EA, a rationale for the change will be presented".</p>	Unresolved: same as above comment #12, the dAIR needs to be updated to reflect this conditional commitment. Changes to the dAIR required.
20	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8, Section 5.15, Section 5.18	20. Tsleil-Waututh requests that the Squamish River and Mamquam River estuaries be included, in addition to the already-included Mill Creek and Woodfibre Creek estuaries.	Marine Water Quality, Freshwater Fish and Fish Habitat, Forage Fish and Other Fish	Yes		<p>The regional assessment areas for marine water quality, freshwater fish and fish habitat and forage fish and other fish includes Howe Sound. See Figures 4-4 and 4-6 of the revised dAIR.</p>	Unresolved: The Appendix was not provided to confirm in Figures 4-4 and 4-6.
21	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8, Section 5.15, Section 5.18	21. Tsleil-Waututh requests that a circulation model be developed for the Regional Assessment Areas of the Marine Water Quality, Freshwater Fish and Fish Habitat, and Forage Fish and Other Fish Study Assessment Areas.	Marine Water Quality, Freshwater Fish and Fish Habitat, Forage Fish and Other Fish	Yes		<p>Near-field and far-field numerical dispersion models are being developed to model the water quality effects associated with seawater cooling system. The results of this model will be presented in Section 5.10 of the EAC Application (Marine Water Quality). Any potential changes to water temperature will be identified in this section. Where applicable, the freshwater fish and fish habitat and forage fish and other fish sections will cross-reference the marine water quality section of the EAC Application. The following text has been added to Section 5.10.3 of the dAIR.</p> <p>Potential Project-related effects to marine water temperature from the seawater cooling system will be modelled using near-field and far-field numerical dispersion models. The model results will be evaluated against marine water quality criteria guidelines. Where applicable, the results of the seawater cooling system dispersion model will be cross-referenced in Section 5.15 - Freshwater Fish and Fish Habitat and Section 5.18 - Forage Fish and Other Fish (Marine).</p>	Unresolved: If not specified in the dAIR, this commitment must be added. Changes to the dAIR required.

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22	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8, Section 5.6, Section 5.7	22. Tsleil-Waututh requests clarification regarding whether marine or freshwater intake will be utilized for the LNG facility. Please provide us with information on the volume of water to be utilized.	Marine Water Quality, Surface Water Quality, Surface Water Quantity	No	Both marine and freshwater intakes will be utilized for the Project. The flows to be diverted are being refined as part of the ongoing design process. It is currently anticipated that the seawater cooling system will collect 17,000 m ³ /h through an intake pipe located more than 25 m below the surface of Howe Sound. After absorbing heat from facility equipment in a closed loop system (i.e., at no time will the seawater come into direct contact with the liquefaction refrigerant(s), the seawater will re-enter the ocean. The LNG facility and supporting facilities will divert less fresh water than the existing Western Forest Products water licence on Mill Creek (0.73 m ³ /s) that will be transferred to WNLG.	Unresolved: Please provide volumes as requested.
23	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Table 5-7	23. Tsleil-Waututh understands that there are no anticipated process water discharges into freshwater sources. We do, however, require information on the nature and volume of discharges into marine water. We request more information on the following discharge parameters for Marine Water Quality (Table 5-7 of dAIR): a. Temperature b. Chlorine c. Any biological and chemical contaminants	Marine Water Quality	No	Additional information regarding baseline marine water quality as well as information regarding the seawater cooling system and any treated process water, storm water or waste water discharges will be included in Section 5.10 [Marine Water Quality]. Nutrients, metals, hydrocarbons (petroleum and PAHs) have been added as indicators for Marine Water Quality (Table 5-9). Total residual chlorine and temperature are already included. Based on the characteristics of the treated discharge, a waste discharge permit from the Oil and Gas Commission may be required.	Unresolved: Please add to the response that nutrient, metals and hydrocarbons (petroleum and PAHs) have been added as indicators to this IC and that temperature and total residual chlorine are included in table 5-9.
24	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Table 5-7	24. Tsleil-Waututh also requests that the following are included in the parameters for Marine Water Quality: a. Dissolved oxygen b. pH c. Conductivity	Marine Water Quality	No	WNLG confirms that dissolved oxygen, pH and conductivity are included in the parameters for study for the Marine Water Quality IC. Dissolved oxygen, pH and conductivity have been added as indicators for Marine Water Quality (Table 5-9). Based on the characteristics of the treated discharge, a waste discharge permit from the Oil and Gas Commission may be required.	Unresolved: Table 5-9 Does not include dissolved oxygen, pH or conductivity as indicators of the Marine Quality IC. Changes to the dAIR required.
25	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 9.2	25. The Public Health Valued Component should be re-titled to include groups other than the general public (e.g., Health or Human Health). We further request that this VC include quality of life and community well-being to encompass the social determinants of health rather than only the physiological influences.	Public Health	Yes	WNLG does not intend to exclude aboriginal health by using 'Public Health' as the VC name. Aboriginal health factors will be included in Section 9 - Assessment of Potential Health Effects. The term Public Health is used because the EA will include a Human Health Risk Assessment (HHRA) and specific key indicators of health information. The Public Health VC has been amended to include two sub-components: (a) Human health risk and (b) Community health and well-being. The indicators for the community health and well-being sub-component includes social determinants of health (e.g., employment and income) and physical and mental health conditions (e.g., disease incidence rates). According to Section 17 [Aboriginal Interests] of the dAIR, where there is overlap between Aboriginal interests and a VC, the information from other sections of the Application will be cross-referenced and summarized in the context of the specific Aboriginal group's Aboriginal Interest.	Unresolved: Add to the response: Public Health VC now includes: a. Human Health Risk Sub-component, and b. Community Health and Well-being sub-component. Also, will an assessment of impacts to Aboriginal health and wellbeing be assessed in Section 17, and if so how?
26	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		26. Tsleil-Waututh requests a definition for the term "country foods" and clarification on whether this definition is included in BCEAO materials. It is imperative that BCEAO clarify the target user-group when assessing impacts to country foods. There is a significant difference between country foods as accessed by members of the general public (i.e., recreational users who may occasionally fish or hunt for recreational purposes) and as accessed by Aboriginal peoples, who hold pre-existing and constitutionally-protected Aboriginal rights to harvest for subsistence, ceremonial, and social purposes. The harvesting of country foods is an Aboriginal right, and therefore, the considerations of the impacts will be different depending upon the user-group in question.	Public Health	Yes	The definition of country foods as it relates to the public health assessment "include those foods trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes, or obtained from recreational activities such as sport fishing and/or game hunting" (Health Canada 2010). This is consistent with the Tsleil-Waututh's requested definition of country foods as "subsistence, ceremonial, and social harvesting of resources (e.g., hunting, fishing, and gathering)". Definition of country foods added to Section 9.2.1 of the dAIR.	Unresolved: See 27 below? Please include the definition provided by health Canada which also includes foods for medicinal purposes. Please include a reference to requirements under CEAA 2012. Please provide information and a reference to the assessment of potential impacts to Aboriginal Interests as part of the EA.

Woodfibre LNG Project – Draft VC Selection/ Draft AIR Working Group Comment Tracking Table

Date:
File:
Revision:

27	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		27. Tsleil-Waututh requests changing the term "country foods" to "subsistence, ceremonial, and social harvesting of resources (e.g., hunting, fishing, and gathering)." This would therefore assess potential project impacts to game, shellfish, fish, and traditional vegetation for food, medicinal, and material use as part of the project environmental evaluation and/or human and ecological health evaluation.	Public Health	No		The definition of country foods as it relates to the public health assessment can be defined as "include those foods trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes, or obtained from recreational activities such as sport fishing and/or game hunting" (Health Canada 2010). This is consistent with the "Tsleil-Waututh's requested definition of country foods as "subsistence, ceremonial, and social harvesting of resources (e.g., hunting, fishing, and gathering)".	Unresolved: : see above
28	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		28. Tsleil-Waututh requests a status update on the current site contamination assessment being conducted by Western Forest Products, along with remediation and monitoring plans. In addition, we request to be provided with site maps identifying sampling locations.	Site Contamination	No		Woodfibre LNG is purchasing the site from Western Forest Products, which is responsible for remediating the site to provincial standards before the sale is finalized. Accordingly, all data relating to the remediation belongs to Western Forest Products not WLNG. Work to clean up the site is ongoing. Western Forest Products' plan for the closure of the historical waste asbestos disposal area has been submitted to the BC Ministry of Environment for review, and a contractor to carry out the work is being selected. Additional sampling of the site is also being carried out as part of the process to obtain a certificate of compliance with the Ministry of Environment.	Resolved - Out of Scope of the EA WNLG responsibility to address the request for a map showing sampling sites if available.
29	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		29. Tsleil-Waututh requests clarification on whether the disposal of contaminants from the property will be land-based or at sea. If the disposal will be at sea, Tsleil-Waututh requests a copy of the permits no less than one month before the disposal is scheduled to occur.	Site Contamination	No		Disposal at sea is not being considered for the construction, operation or decommissioning of the Project. Disposal of materials related to the remediation project are being managed by Western Forest Products prior to transfer of the site to WLNG.	Unresolved - address the question if disposal at sea is being considered.
30	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.5.1.2	30. Under Section 5.5.1.2, Tsleil-Waututh requests a rationale for not including the decommissioning phase under the temporal boundaries section for the Site Contamination Intermediate Component (IC). We request that the decommissioning phase is included for this IC.	Site Contamination	Yes		The activity allowing new facility construction is regulated under the BC Environmental Management Act (EMA) and its associated Contaminated Sites Regulation. This requires that the proponent obtain a Certificate of Compliance (CoC) demonstrating site remediation. The activity of decommissioning a site operated under license issued from the Oil and Gas Commission (OGC), is regulated under the Oil and Gas Activities Act, Petroleum and Natural Gas Act and the associated Environmental Management Act, and associated regulations. OGC requires investigation and determination of whether a subject site is high risk or not. If it is, then an EMA Certificate of Compliance required; if not, then OGC COR (Certificate of Restoration) is required. The decommissioning phase as pertaining to potential site contamination is governed by British Columbia statute and regulation. As such, no addition to the effects assessment scope for decommissioning is required. Nonetheless, the effects assessment will present the commitments as listed under the regulations specified above, which the proponent will be required to adhere to as part of the decommissioning phase of the Project.	Unresolved: changes to the dAIR required. Please review section 2.1.6 of the Section 11 Order, which outlines the scope of the environmental assessment, which includes decommissioning.
31	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 6.3.1	31. Tsleil-Waututh requests that Aboriginal fishers be listed as a distinct marine user, under the sub-component Commercial Marine Use of the Sustainable Economy VC (Section 6.3.1).	Sustainable Economy	No		Potential Project effects on OFD-licensed commercial fishing and seafood harvesting activity will be assessed as part of the assessment of the Sustainable Economy VC (Commercial Marine Use sub-component). The Commercial Marine Use sub-component will not separate considerations of public from Aboriginal groups. According to Section 17 [Aboriginal Interests] of the dAIR, where there is overlap between Aboriginal interests and a VC, the information from other sections of the Application will be cross-referenced and summarized in the context of the specific Aboriginal group's Aboriginal Interest.	Unresolved: reword response: Assessment of potential impacts to Aboriginal harvest of fish other marine resources for food, social and ceremonial purposes will be assessed in Part C of the Application.
32	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.11	32. Tsleil-Waututh requests that there be an inventory of impacts on old growth forests.	Vegetation Communities	No		Effects to vegetation communities will be considered in Section 5.11 of the EAC application. Effects to old-growth forests are not anticipated as part of the Project due to the Project area's industrial history; however, this will be confirmed in the EAC application.	Resolved to EAO's satisfaction

Mayall, Jane EAO:EX

From: Byng Giraud <byng_giraud@wlng.ca>
Sent: Monday, July 14, 2014 4:51 PM
To: Paulson, Amber EAO:EX; Amanda Zinter; Smith, Alanya C EAO:EX
Cc: Mayall, Jane EAO:EX; Lara Taylor
Subject: 30050-20/WLNG-15 FW: Open house Advertising
Attachments: Woodfibre LNG EAO Open House - Squamish Chief PRINT.pdf; Woodfibre Advertising Receipts June 2014.pdf

As per your request. Proof of advertising BC EAO/Woodfibre LNG open house in Squamish.

Byng

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Environmental Assessment of the Proposed Woodfibre LNG Project

Open House and Invitation to Comment

Woodfibre LNG Limited (Proponent) is proposing to develop and operate the Woodfibre LNG Project (proposed Project), a liquefied natural gas (LNG) production, storage and marine carrier transfer facility for the export of LNG. The proposed Project will be located approximately 7 kilometres southwest of Squamish, British Columbia. The proposed Project would export approximately 2.1 million metric tonnes per annum of LNG.

The proposed Project is subject to review under British Columbia's *Environmental Assessment Act* and is also undergoing a substituted environmental assessment under the *Canadian Environmental Assessment Act*.

The Proponent must obtain an environmental assessment certificate before any work can be undertaken on the proposed Project. However, prior to submission of an application (Application) for a certificate by the Proponent, Environmental Assessment Office of British Columbia (EAO) must first approve Application Information Requirements.

Key to the Application Information Requirements is the identification of Valued Components to be studied and the areas within which the studies would occur. This is done through the Valued Component Selection Document which EAO has now received and invites comments on.

In order to provide information about the Valued Component Selection, EAO invites the public to attend an Open House. There will be an Open House, to be held as follows:

at: Executive Suites Hotel & Resort, 40900 Tantalus Road, Squamish

on: June 18, 2014

from: 5:00 p.m. to 8:00 p.m.

There are 30 days for the submission of comments by the public in relation to the Valued Component Selection Document. The comment period will begin on June 12, 2014 and end on July 11, 2014.

All comments received during this comment period in relation to the Valued Component Selection Document will be considered.

The intention of seeking public comments is to ensure that all potential effects – environmental, economic, social, heritage and health – that might result from the proposed Project are identified for consideration as part of the assessment process. At this stage of the process, the primary intent is to receive feedback about the studies or information required for a comprehensive environmental assessment.

After taking public comments into account, EAO will finalize the Application Information Requirements and issue them to the Proponent.

EAO accepts public comments through the following ways:

- **By Online Form**
at <http://www.eao.gov.bc.ca>
- **By Mail:**
Josh Handysides
Project Assessment Manager
Environmental
Assessment Office
PO Box 9426 Stn Prov Govt
Victoria BC V8W 9V1
- **By Fax:**
Fax: 250-387-0230

An electronic copy of the Valued Component Selection Document and information regarding the environmental assessment process are available at www.eao.gov.bc.ca. Copies of the Valued Component Selection Document are also available for viewing at these locations:

- District of Squamish Municipal Hall, 37955 Second Avenue
- Squamish Public Library, 37907 Second Avenue

If you are unable to participate at this time, there will be an additional comment period during the Application Review stage when you will also be able to provide comments to EAO on the proposed Project.

NOTE: All submissions received by EAO during the comment period in relation to the proposed Project are considered public and will be posted to the EAO website.





The Chief

Box 3500
Squamish, BC V8B 0B9
Ph: 604-892-9161 Fax: 604-892-8483

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Date : 06/30/2014

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Publication : Pique News Magazine Title : 14237/Woodfibre LNG Ad Size : E, 2.0000 Col. x 12.8750 Inches Section: ROP Reference #: 14237 Ad Space		Issue Date : 06/05/2014 P.O. # : Job # : R002798363 Ad # : 2329824 Color : Black & White 395.00	0.00	395.00
Publication : Squamish Chief Title : 14237/LNG Ad Size : 1-2TH-V, 3.0000 Col. x 13.3750 Inches Section: ROP Reference #: 14237 Ad Space		Issue Date : 06/05/2014 P.O. # : Job # : R001801090 Ad # : 2335977 Color : Black & White 580.00	0.00	580.00
Publication : Whistler Question Title : 14237/Client TBC Ad Size : 1-2TH-V, 3.0000 Col. x 13.3750 Inches Section: ROP Reference #: 14237 Ad Space		Issue Date : 06/10/2014 P.O. # : Job # : R001798363 Ad # : 2329817 Color : Black & White 493.00	0.00	493.00
Publication : Pique News Magazine Title : 14237/Woodfibre LNG Ad Size : E, 2.0000 Col. x 12.8750 Inches Section: ROP Reference #: 14237 Ad Space		Issue Date : 06/12/2014 P.O. # : Job # : R002798363 Ad # : 2329825 Color : Black & White 395.00	0.00	395.00
Publication : Squamish Chief Title : 14247/LNG-Participation Ad Size : 1-2TH-V, 3.0000 Col. x 13.3750 Inches Section: ROP Reference #: 14247 Ad Space		Issue Date : 06/12/2014 P.O. # : Job # : R001801090 Ad # : 2335978 Color : Black & White 580.00	0.00	580.00

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Publication : Pique News Magazine Title : 14247/LNG Open House Ad Size : E, 2.0000 Col. x 12.3750 Inches Section: ROP Reference #: 14247 Ad Space		Issue Date : 06/12/2014 P.O. # : Job #: R002806264 Ad # : 2346556 Color: Black & White 395.00	0.00	395.00
Publication : Coast Reporter Title : 14247/LNG Open House Ad Size : 1/2VCRP, 3.0000 Col. x 14.7997 Inches Section: ROP Reference #: 14247 Page: A22 Ad Space	14.70000	Issue Date : 06/13/2014 P.O. # : Job #: R003806264 Ad # : 2346557 Color: Black & White 652.87	0.00	652.87
Publication : Whistler Question Title : 14237/Client TBC Ad Size : 1-2TH-V, 3.0000 Col. x 13.3750 Inches Section: ROP Reference #: 14237 Ad Space		Issue Date : 06/17/2014 P.O. # : Job #: R001798363 Ad # : 2329818 Color: Black & White 496.00	0.00	496.00
Publication : Whistler Question Title : 14247/LNG Open House Ad Size : 1-2TH-V, 3.0000 Col. x 13.3750 Inches Section: ROP Reference #: 14247 Ad Space		Issue Date : 06/17/2014 P.O. # : Job #: R001806264 Ad # : 2346555 Color: Black & White 496.00	0.00	496.00

**The Chief**

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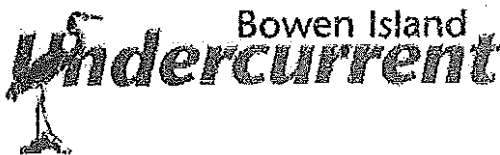
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Publication: Bowen Island Undercurrent		Issue Date: 06/06/2014		
Title: KIRK & CO		P.O. #:		
Ad Size: 4.0000 Col. x 196 Agate Lines		Job #: R001800244		
Section: ROP		Ad #: 2334051		
Reference #:		Color: Black & White		
Page: A10				
Ad Space		365.00	0.00	365.00

Terms: O.A.C. Net 30 days. Interest may be charged at a rate of 2% per month (26.8% per annum) on overdue accounts.

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INVOICE TOTAL: 383.25
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Invoice No.: BIUD00000399
Date: 06/10/2014

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Mayall, Jane EAO:EX

From: Smith, Alanya C EAO:EX
Sent: Friday, August 1, 2014 2:38 PM
To: Lara Taylor (ltaylor@hemmera.com); 'Byng Giraud'; 'Amanda Zinter'
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: 30050-20/WLNG-05-06 FW: For Review: Draft #2 AIR for Woodfibre LNG
Attachments: RDIMS-#9769718-v1-
WOODFIBRE_LNG_-_DAIR_REVIEW_-_TC_S_COMMENTS_ON_PROPOSAL_S_RESPONSE
S.xlsx

Please find comments from TC attached. Note that there will be additional comment on the spatial boundary for outdoor recreation from TC.

Thank you

Alanya

From: Doucette, Paula [<mailto:Paula.Doucette@tc.gc.ca>]
Sent: Friday, August 1, 2014 2:13 PM
To: Smith, Alanya C EAO:EX
Cc: Dight, Roberta; Russell, Madhvi
Subject: RE: For Review: Draft #2 AIR for Woodfibre LNG

Hi Alanya, we have taken a look at the comments and have no issues with their responses (see attached table). I've sent a note to Roberta regarding the decrease in spatial boundary for the Outdoor Rec assessment and she can get back to you with any concerns. s.22 If you need any assistance, feel free to contact my Manager, Ian Chatwell or if it can wait, I'll be back on August 18th. Thanks, paula

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TWN-1	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		1. Tsleil-Waututh requests an assessment of the environmental impacts of both land-based and floating storage and offloading facilities for the Project.	Project Description	No		Since the Working Group meeting, WLNG has confirmed the project layout. The LNG facility will be located on land, and the floating storage and offloading unit will be located on water. This project description will be assessed as part of the environmental assessment certificate (EAC) application.	
TWN-2	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		2. From meetings with Woodfibre LNG (April 28, 2014) and the latest Advisory Working Group Meeting (May 12, 2014) for the Project, it is our understanding that the LNG storage facility is to be located on water. Tsleil-Waututh requests that the proponent provide the rationale behind this decision.	Project Description	No		The LNG storage facility will be located on water for two primary reasons. Firstly, constructing land-based LNG storage that meets the current building code seismic standards would be challenging. The water-based storage facility is able to better withstand seismic events. Secondly, decommissioning the facility at the end of its service period would have less environmental impact with water-based storage.	
TWN-3	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		3. Tsleil-Waututh requests clarification on the amount of land that will be used by the project: both disturbed (brownfield) and undisturbed (greenfield) land.	Project Description	No		The Project will primarily be located within areas that have already been cleared; however, some areas of additional clearing will be required. The areas where clearing is expected to be required include the natural gas pipeline from the metering station to the LNG facility and the stepdown transformers. This information will be confirmed in the Project Description section of the EAC Application and carried forward into the effects assessment as required. Section 5.11.3 of the dAIR states that Project effects that will be assessed include direct loss of native vegetation during Project construction. WLNG is currently calculating the areas anticipated to be cleared for the Project and will provide these areas to the Tsleil-Waututh Nation.	
TWN-4	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 2.2	4. In Section 2.2, under "The Application will provide the following" please add "Identification of First Nations whose territories the proposed Project is situated on."	Project Description	Yes		The following bullet has been added to Section 2.2 of the dAIR, identification of the Aboriginal groups whose territories the Project is located within.	
TWN-5	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 2.8	5. Under Section 2.6 - Project Benefits, Tsleil-Waututh requests that economic benefits to First Nations be identified, including Aboriginal procurement, one of a number of mechanisms to ensure meaningful economic benefits are returned to local First Nations.	Project Benefits	Yes		The following changes have been made to the 2nd paragraph in Section 2.6 (changes in red text): The Proponent anticipates hiring qualified, competitive, local residents for its workforce from Squamish and the surrounding area, including local Aboriginal groups, where the appropriate skills are available. The Proponent will also consider economic benefits. Section 17 of the EAC Application will include Aboriginal interests, as identified by publicly available information and also by the views expressed by Aboriginal groups through the consultation process. Section 20 of the EA will summarize the issues and concerns raised, along with the proposed mitigation measures.	
TWN-6	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 17	6. Tsleil-Waututh seeks assurances that potential impacts to Aboriginal harvesting rights (e.g., hunting, fishing and gathering rights) be assessed as part of the project environmental evaluation that includes both specific sites and favoured species.	Aboriginal Interests	No		WLNG confirms that, where information is available, potential impacts to Aboriginal harvesting rights will be assessed as part of the environmental evaluation. Further information regarding how these effects will be considered is provided in Section 17 (Aboriginal Interests) of the dAIR.	
TWN-7	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 17	7. Since there is no separate pillar for "Aboriginal rights and title", will the concerns of Aboriginal groups be considered and made explicit under each Valued Component?	Aboriginal Interests	No		If information is available, each VC section of the EAC Application will describe how traditional knowledge and traditional use information, as obtained through consultation with Aboriginal groups and other sources, were used in the assessment. Where there is overlap between Aboriginal interests and a VC, the information from either sections of the Application will be cross-referenced in Section 17 and summarized in the context of the specific Aboriginal group's Aboriginal Interest.	
TWN-8	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5	8. We request there be an inventory of impacts on the following species: a. Ungulates b. Black bear c. Cougar d. Wolf	Assessment of Potential Environmental Effects (Mammals)	No		(a) The potential for ungulate populations to experience long-term project-related effects is considered negligible. Ungulates are not recommended for inclusion as a project VC. 1) Potential to occur: Black-tailed deer are a common species in the Squamish Forest District and may occur within adjacent habitats. Elk have been introduced into the Clowhorn drainage by MFLNRO. Elk also occur in nearby McNab drainage and may occur within adjacent habitats. 2) Potential to be affected: Consideration of Project design and siting (i.e., brownfield site) and consideration of species habitat association and habitat value based on current site conditions also suggest that ungulates will not be affected by Project development. Mitigation measures such as perimeter fencing will further reduce the potential for ungulate populations to be adversely affected by the Project.	

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								No		(b) The potential for black bear populations to experience long-term project-related effects is considered negligible. Black bear is not recommended for inclusion as a Project VC. 1) Potential to occur: Black bear are a common species in the Squamish Forest District and may occur within adjacent habitats. 2) Potential to be affected: Current mitigation (perimeter fencing and management of wildlife-human conflict) was considered to assess potential Project-related effects to the species. Consideration of Project design and siting (i.e., brownfield site) and consideration of species habitat association and habitat value based on current site conditions suggest that black bear populations will not be affected by Project activities.	
								No		(c) The potential for wolf populations to experience long-term project-related effects is considered negligible. Gray wolf is not recommended for inclusion as a Project VC. 1) Potential to occur: Wolves are a common species in the Squamish Forest District and may occur within adjacent habitats. 2) Potential to be affected: Current mitigation (perimeter fencing and management of wildlife-human conflict) was considered to assess potential project-related effects to the species. Consideration of Project design and siting (i.e., brownfield site) and consideration of species habitat association and habitat value based on current site conditions suggest that wolves will not be affected by Project activities.	
								No		(d) The potential for cougar populations to experience long-term project-related effects is considered negligible. Cougar is not recommended for inclusion as a Project VC. 1) Potential to occur: Cougar are a common species in the Squamish Forest District and may occur within adjacent habitats. 2) Potential to be affected: Current mitigation (perimeter fencing and management of wildlife-human conflict) was considered to assess potential Project-related effects to the species. Consideration of Project design and siting (i.e., brownfield site) and consideration of species habitat association and habitat value based on current site conditions suggest that cougar will not be affected by Project activities.	
TWN-9	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8	9. Tsleil-Waututh requests information on sewage discharge and whether the sewage treatment sites on the property will be included in the environmental assessment and/or remediation plans.	Marine Water Quality	No		Information on discharges to the marine environment will be included in the EAC application, including the potential effects associated with these discharges. Sewage discharge requirements will also be addressed during the permitting process. Applications will be submitted to the Oil and Gas Commission (OGC) for any required waste discharge permits (including air emissions, effluent discharges, and refuse disposal). Sewage discharge may also require permits from the District of Squamish and Vancouver Coastal Health. The site is being remediated by the current owner (Western Forest Products) and a Ministry of Environment Certificate of Compliance (CoC) will be obtained as a condition of purchase. Any mitigation or monitoring requirements of the CoC will be fulfilled by WNLG.	
TWN-10	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 7.3	10. Tsleil-Waututh requests an update on the status of Transport Canada's TERMPOL review process for this Project.	Marine Transport	No		A TERMPOL review will be conducted for the Project. WNLG has started discussions with Transport Canada. The TERMPOL assessment will be completed after the Project has submitted the EAC application.	
TWN-11	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.9	11. Tsleil-Waututh requests more information on air emissions from the LNG facility and shipping activities (including both LNG tankers, export tugs, and ferrying of employees) within the Regional Assessment Area for Atmospheric Environment.	Atmospheric Environment (Air Quality)	No		WNLG confirms that additional information on the potential effects on air quality from air emissions from the LNG facility and shipping activities will be provided in the EAC application.	
TWN-12	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.9	12. Tsleil-Waututh requests that the Atmospheric Environment Assessment Areas include the Indian River Watershed and Indian Arm in the Local Assessment Area.	Atmospheric Environment (Air Quality)	No		The assessment areas for air quality encompass the area where potential effects are expected to occur. If preliminary modelling indicates the extent of the effects is larger than the current assessment area, the assessment area may be expanded. Section 4.3.1.1 includes the following statement: "The anticipated boundaries for the assessment of the Project-related effects on each VC have been determined to encompass the physical scope of the environmental and socio-economic effects that could occur due to Project-related construction and operation activities (Tables 4-2 and 4-3). Additional rationale for the selection of the boundaries is included in Section 5.0 through Section 5.0 for each IC and VC. Should boundaries change during the course of preparation of the EA, a rationale for the change will be presented".	

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TWN-13	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.4	13. Tsleil-Waututh requests that channel geomorphology and potential impacts to creek geomorphology are included.	Geomorphology and Natural Hazards	No		WLNG does not anticipate effects to creek geomorphology would occur because the Project will only affect flows in Mill Creek over a short reach (~500 m).	
TWN-14	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.10	14. Tsleil-Waututh requests more information on how the GHG Valued Component will be assessed without definitive spatial boundaries.	GHG Management	No		The climate change assessment will include characterizing the historic and future climate, changes in future climate and how climate change may affect the Project Infrastructure. This work will focus on the same study area as the RAA for air quality. The climate change assessment will also consider how the Project will contribute to GHG emissions. This will be undertaken by quantifying GHG emissions associated with the Project and comparing to provincial and federal levels of GHG emissions.	
TWN-15	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 8.0	15. The Heritage Resources Valued Component should also include the cultural importance of lands, waters and resources, specifically culturally valued sites (e.g., spiritual sites, transformer sites, viewscapes) identified by First Nations in the Heritage Pillar.	Heritage Resources	No		WLNG confirms that, where available, the Heritage Resources VC will include information on the traditional knowledge and traditional use information. Where there is overlap between Aboriginal Interests and a VC, the information from other sections of the Application will be cross-referenced in Section 17 and summarized in the context of the specific Aboriginal group's Aboriginal Interest.	
TWN-16	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.19	16. Tsleil-Waututh is concerned about impacts to Southern Resident Killer Whales (SRKW) and other marine mammals as a result of the Project, and would like more information on the following: a. Increased marine traffic, and therefore vessel strikes, to marine mammals (including SRKW) b. Acoustic disturbance to marine mammals (including SRKW)	Marine Mammals	No		WLNG acknowledges the concern of the Tsleil-Waututh and confirms that potential effects to killer whales, including southern resident killer whales, and other marine mammals as a result of direct and indirect effects from Project activities will be assessed. WLNG confirms that the assessment for the Marine Mammals VC effects assessment will include increased marine traffic and acoustic disturbances.	
TWN-17	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 7.3	17. Tsleil-Waututh requests information on how the proponent plans to monitor the impacts from third party vessels (i.e., escort tugs) associated with the project.	Marine Transport	No		Additional information regarding the use of support vessels, including escort tugs, will be included in the EAC Application, including an assessment of those activities on the VCA. Vessels used for the Project will transit in accordance with the Canada Shipping Act (2001) and regulations established by Transport Canada and the Pacific Pilotage Authority. In addition, a description of monitoring programs that are anticipated to be required during Project construction and operation will be included in Section 13 of the EAC Application.	
TWN-18	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 7.3	18. Tsleil-Waututh is concerned about increased marine vessel traffic and requests more information on the underwater acoustic footprint of the following vessels on marine life: a. LNG tankers b. Escort tugs	Marine Transport	No		WLNG confirms that information regarding the underwater noise expected to be associated with the Project will be provided in the EAC Application, including the underwater noise associated with shipping activities. This information will be carried forward into the relevant VC effects assessments, specifically Section 5.18 - Forage Fish and Other Fish and Section 5.19 Marine Mammals. Noise levels of LNG tankers and escort tugs will be characterized based on available information in the public domain / scientific literature, and this will be compared to known acoustic threshold criteria for toothed whales and baleen whales to assess the likelihood and consequence of potential underwater noise impacts on these receptors. Recommended mitigation measures to minimize effects of underwater noise on sensitive marine receptors will be provided as part of the environmental assessment. One measure to reduce underwater noise is to locate the LNG facility on land. As well, LNG carriers will be required to follow Pacific Pilotage Authority's speed requirements. Further mitigation measures for underwater noise will be identified in the EAC Application.	
TWN-19	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8, Section 5.15, Section 5.18	19. Tsleil-Waututh requests that the Regional Assessment Areas for the Marine Water Quality, Freshwater Fish and Fish Habitat, and Forage Fish and Other Fish Study Assessment Areas be expanded to include First Narrows of Burrard Inlet and the western edge of Gower Point, approximately 4 km west of Gibsons.	Marine Water Quality, Freshwater Fish and Fish Habitat, Forage Fish and Other Fish	No		The assessment areas for marine water quality, freshwater fish and fish habitat and forage fish and other fish encompass the area where potential effects are expected to occur. If the effects assessment indicates the extent of the effects is larger than the current assessment area, the assessment area may be expanded. Section 4.3.1.1 includes the following statement: "The anticipated boundaries for the assessment of the Project-related effects on each VC have been determined to encompass the physical scope of the environmental and socio-economic effects that could occur due to Project-related construction and operation activities (Tables 4-2 and 4-3). Additional rationale for the selection of the boundaries is included in Section 5.0 through Section 5.0 for each IC and VC. Should boundaries change during the course of preparation of the EA, a rationale for the change will be presented".	

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TWN-20	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8, Section 5.15, Section 5.18	20. Tsleil-Waututh requests that the Squishish River and Mamquam River estuaries be included, in addition to the already-included Mill Creek and Woodfibre Creek estuaries.	Marine Water Quality, Freshwater Fish and Fish Habitat, Forage Fish and Other Fish	Yes		The regional assessment areas for marine water quality, freshwater fish and fish habitat and forage fish and other fish includes Howe Sound. See Figures 4-4 and 4-6 of the revised dAIR.	
TWN-21	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8, Section 5.15, Section 5.18	21. Tsleil-Waututh requests that a circulation model be developed for the Regional Assessment Areas of the Marine Water Quality, Freshwater Fish and Fish Habitat, and Forage Fish and Other Fish Study Assessment Areas.	Marine Water Quality, Freshwater Fish and Fish Habitat, Forage Fish and Other Fish	Yes		Near-field and far-field numerical dispersion models are being developed to model the water quality effects associated with seawater cooling system. The results of this model will be presented in Section 5.10 of the EAC Application (Marine Water Quality). Any potential changes to water temperature will be identified in this section. Where applicable, the freshwater fish and fish habitat and forage fish and other fish sections will cross reference the marine water quality section of the EAC Application. The following text has been added to Section 5.10.3 of the dAIR: Potential Project-related effects to marine water temperature from the seawater cooling system will be modelled using near-field and far-field numerical dispersion models. The model results will be evaluated against marine water quality criteria guidelines. Where applicable, the results of the seawater cooling system dispersion model will be cross-referenced in Section 5.15 - Freshwater Fish and Fish Habitat and Section 5.18 - Forage Fish and Other Fish (Marine).	
TWN-22	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.8, Section 5.6, Section 5.7	22. Tsleil-Waututh requests clarification regarding whether marine or freshwater intakes will be utilized for the LNG facility. Please provide us with information on the volume of water to be utilized.	Marine Water Quality, Surface Water Quantity	No		Both marine and freshwater intakes will be utilized for the Project. The flows to be diverted are being refined as part of the ongoing design process. It is currently anticipated that the seawater cooling system will collect 17,000 m ³ /h through an intake pipe located more than 25 m below the surface of Howe Sound. After absorbing heat from facility equipment in a closed loop system (i.e. at no time will the seawater come into direct contact with the liquefaction refrigerants), the seawater will re-enter the ocean. The LNG facility and supporting facilities will divert less fresh water than the existing Western Forest Products water licence on Mill Creek (0.73 m ³ /s) that will be transferred to WFLNG. Additional information regarding the water intakes will be provided in the EAC Application. Water diversions from Mill Creek will be considered in Section 5.9 (Surface Water Quantity) and the seawater cooling system will be considered in Section 5.10 (Marine Water Quality). Where appropriate, mitigation measures will be identified as part of the effects assessments for potentially affected VCs.	
TWN-23	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Table 5-7	23. Tsleil-Waututh understands that there are no anticipated process water discharges into freshwater sources. We do, however, require information on the nature and volume of discharges into marine water. We request more information on the following discharge parameters for Marine Water Quality (Table 5-7 of dAIR): a. Temperature b. Chlorine c. Any biological and chemical contaminants	Marine Water Quality	No		Additional information regarding baseline marine water quality as well as information regarding the seawater cooling system and any treated process water, storm water or waste water discharges will be included in Section 5.10 (Marine Water Quality). Nutrients, metals, hydrocarbons (petroleum and PAHs) have been added as indicators for Marine Water Quality (Table 5-6). Total residual chlorine and temperature are already included. Based on the characteristics of the treated discharge, a waste discharge permit from the Oil and Gas Commission may be required.	
TWN-24	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Table 5-7	24. Tsleil-Waututh also requests that the following are included in the parameters for Marine Water Quality: a. Dissolved oxygen b. pH c. Conductivity	Marine Water Quality	No		WFLNG confirms that dissolved oxygen, pH and conductivity are included in the parameters for study for the Marine Water Quality IC. Dissolved oxygen, pH and conductivity have been added as indicators for Marine Water Quality (Table 5-6). Based on the characteristics of the treated discharge, a waste discharge permit from the Oil and Gas Commission may be required.	

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TWN-25	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 9.2	25. The Public Health Valued Component should be re-titled to include groups other than the general public (e.g., Health or Human Health). We further request that this VC include quality of life and community well-being to encompass the social determinants of health rather than only the physiological influences.	Public Health	Yes		<p>WNLG does not intend to exclude aboriginal health by using 'Public Health' as the VC name. Aboriginal health factors will be included in Section 9 – Assessment of Potential Health Effects. The term Public Health is used because the EA will include a Human Health Risk Assessment (HHRA) and specific key indicators of health information.</p> <p>The Public Health VC has been amended to include two sub-components: (a) human health risk and (b) Community health and well-being. The indicators for the community health and well-being sub-component includes social determinants of health (e.g., employment and income) and physical and mental health conditions (e.g., disease incidence rates).</p> <p>According to Section 17 (Aboriginal Interests) of the dAIR, where there is overlap between Aboriginal Interests and a VC, the information from other sections of the Application will be cross-referenced and summarized in the context of the specific Aboriginal group's Aboriginal Interest.</p>	
TWN-26	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		26. Tsleil-Waututh requests a definition for the term "country foods" and clarification on whether this definition is included in BCIAO materials. It is imperative that BCEAO clarify the target user-group when assessing impacts to country foods. There is a significant difference between country foods as accessed by members of the general public (i.e., recreational users who may occasionally fish or hunt for recreational purposes) and as accessed by Aboriginal peoples, who hold pre-existing and constitutionally-protected Aboriginal rights to harvest for subsistence, ceremonial, and social purposes. The harvesting of country foods is an Aboriginal right, and therefore, the considerations of the impacts will be different depending upon the user-group in question.	Public Health			<p>The definition of country foods as it relates to the public health assessment "include those foods trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes, or obtained from recreational activities such as sport fishing and/or game hunting" (Health Canada 2010). This is consistent with the Tsleil-Waututh's requested definition of country foods as "subsistence, ceremonial, and social harvesting of resources (e.g., hunting, fishing, and gathering)".</p> <p>Definition of country foods added to Section 9.2.1 of the dAIR.</p>	
TWN-27	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		27. Tsleil-Waututh requests changing the term "country foods" to "subsistence, ceremonial, and social harvesting of resources (e.g., hunting, fishing, and gathering)." This would therefore assess potential project impacts to game, shellfish, fish, and traditional vegetation for food, medicinal, and material use as part of the project environmental evaluation and/or human and ecological health evaluation.	Public Health			The definition of country foods as it relates to the public health assessment can be defined as "include those foods trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes, or obtained from recreational activities such as sport fishing and/or game hunting" (Health Canada 2010). This is consistent with the Tsleil-Waututh's requested definition of country foods as "subsistence, ceremonial, and social harvesting of resources (e.g., hunting, fishing, and gathering)".	
TWN-28	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		28. Tsleil-Waututh requests a status update on the current site contamination assessment being conducted by Western Forest Products, along with remediation and monitoring plans. In addition, we request to be provided with site maps identifying sampling locations.	Site Contamination	No		Woodfibre LNG is purchasing the site from Western Forest Products, which is responsible for remediating the site to provincial standards before the sale is finalized. Accordingly, all data relating to the remediation belongs to Western Forest Products not WNLG. Work to clean up the site is ongoing. Western Forest Products' plan for the closure of the historical waste asbestos disposal area has been submitted to the BC Ministry of Environment for review, and a contractor to carry out the work is being selected. Additional sampling of the site is also being carried out as part of the process to obtain a certificate of compliance with the Ministry of Environment.	
TWN-29	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR		29. Tsleil-Waututh requests clarification on whether the disposal of contaminants from the property will be land-based or at sea. If the disposal will be at sea, Tsleil-Waututh requests a copy of the permits no less than one month before the disposal is scheduled to occur.	Site Contamination	No		<p>Disposal at sea is not being considered for the construction, operation or decommissioning of the Project.</p> <p>Disposal of materials related to the remediation project are being managed by Western Forest Products prior to transfer of the site to WNLG.</p>	

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TWN-30	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.3.1.2	30. Under Section 5.3.1.2, Tsleil-Waututh requests a rationale for not including the decommissioning phase under the temporal boundaries section for the Site Contamination Intermediate Component (IC). We request that the decommissioning phase is included for this IC.	Site Contamination	Yes		<p>The activity allowing new facility construction is regulated under the BC Environmental Management Act (EMA) and its associated Contaminated Site Regulation. This requires that the proponent obtain a Certificate of Compliance (CoC) demonstrating site remediation.</p> <p>The activity of decommissioning a site operated under license issued from the Oil and Gas Commission (OGC), is regulated under the Oil and Gas Activities Act, Petroleum and Natural Gas Act and the associated Environmental Management Act, and associated regulations. OGC requires investigation and determination of whether a subject site is high risk or not. If it is, then an EMA Certificate of Compliance is required; if not, then OGC COR (Certificate of Restoration) is required.</p> <p>The decommissioning phase as pertaining to potential site contamination is governed by British Columbia statute and regulation. As such, no addition to the effects assessment scope for decommissioning is required. Nonetheless, the effects assessment will present the commitments as listed under the regulations specified above, which the proponent will be required to adhere to as part of the decommissioning phase of the Project.</p>	
TWN-31	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 6.3.1	31. Tsleil-Waututh requests that Aboriginal fisheries be listed as a distinct marine user, under the sub-component Commercial Marine Use of the Sustainable Economy VC (Section 6.3.1).	Sustainable Economy	No		<p>Potential Project effects on DFO-licensed commercial fishing and seafood harvesting activity will be assessed as part of the assessment of the Sustainable Economy VC (Commercial Marine Use sub-component). The Commercial Marine Use sub-component will not separate considerations of public from Aboriginal groups.</p> <p>According to Section 17 (Aboriginal Interests) of the dAIR, where there is overlap between Aboriginal Interests and a VC, the information from other sections of this Application will be cross-referenced and summarized in the context of the specific Aboriginal group's Aboriginal Interests.</p>	
TWN-32	2-Jun-14	Erin Hanson, Consultation and Accommodation Coordinator	Tsleil-Waututh Nation	dAIR	Section 5.11	32. Tsleil-Waututh requests that there be an inventory of impacts on old growth forests.	Vegetation Communities	No		Effects to vegetation communities will be considered in Section 5.11 of the EAC application. Effects to old-growth forests are not anticipated as part of the Project due to the Project area's industrial history; however, this will be confirmed in the EAC application.	
1	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	2.2.5- P10	There are no buildings identified to support Fire Fighting / Rescue / Training services during the construction phase. Will this be addressed?	Project Description	No	Permitting Requirement Local government	<p>Prior to operation of the Project, the Liquefied Natural Gas Facility Regulation requires that WNLG prepare a Safety Loss and Management Program that complies with CSA 2276. This program includes a detailed Emergency Response Plan that includes documented emergency response plans, required equipment, training requirements, identification of trained personnel and plans for emergency drills and exercises. The Project will be self-sufficient in terms of emergency response during operations.</p> <p>Potential effects to existing emergency services will be considered as a subcomponent of the 'Community and Infrastructure Services' VC.</p> <p>WNLG has met with the Squamish Fire Rescue to discuss their concerns, and will continue ongoing dialogue as required.</p>	
2	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	2.2.5- P11	Supporting Infrastructure – Would the proponent expand on the types of safety facilities and the types of structures? Will they have the ability to be self-sufficient in the event of an Earthquake for an extended period of time?	Project Description	No	Permitting Requirement Local government	<p>Please also see the response to Comment #1.</p> <p>WNLG has met with the Squamish Fire Rescue to discuss their concerns, and will continue ongoing dialogue as required.</p>	
3	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	2.2.6.1 - P12	Will there be a hydrant system developed on site with engineered water flows to support firefighting and fire suppression operations?	Project Description	No	Permitting Requirement Local government and CSA	<p>Please also see the response to Comment #1.</p> <p>The Project will include a deluge system and fire hydrants. Fire fighting requirements will be assessed during the detailed Emergency Response Plan developed during the permitting process.</p>	
4	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	2.2.6.1 - P13	Will the ferry system/barge be capable of transporting vehicles up to 35,000kg and 12 meters in length if required?	Project Description	No	Permitting Requirement Local government	<p>The transporting of emergency vehicles by ferry to the site in the event of an emergency will not be required. The Project will be self-sufficient in terms of emergency response during operations.</p> <p>WNLG has met with the Squamish Fire Rescue to discuss their concerns, and will continue ongoing dialogue as required.</p>	

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5	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District (SCRD)	dAIR		b) Reference should be made to the proposed Provincial process known as Cumulative Effects Assessment Framework for Howe Sound and potential increase in emissions from alteration to Port Mollan compressor station should be identified for consideration.	Environmental Assessment Methods	Yes		<p>The EA will include a Project-related cumulative effects assessment according to provincial and federal guidelines, in which other projects that may interact cumulatively with Project-related residual effects will be considered.</p> <p>The Eagle Mountain Gas Pipeline Project (in which the upgrades to the Port Mollan compressor station are being considered) was inadvertently omitted from Table 4-5 in the dAIR, and has now been included.</p> <p>We understand that there are ongoing discussions within the province regarding a Cumulative Effects Framework for Howe Sound; however, it is not in place at this time.</p>	

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6	2-Jun-14	Kellie Leedham, on behalf of MoE and Mohr, Manager, Operations	Ministry of Environment- Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 39, Section 4.6	The Port Mellon Pulp mill should be included in the assessment as an existing and future source that may interact and/or affect the project.	Environmental Assessment Methods	Yes		Table 4-5 in the dAIR has been edited to include the Port Mellon Pulp Mill.		
7	30-May-14	SCRD (David Ruffel, Senior Planner)	Sunshine Coast Regional District (SCRD)	dAIR		a) The list of Projects/Activities for Cumulative Effects Assessment needs to include specific activities from existing establishments such as Camp Potlatch for consideration.	Environmental Assessment Methods	No		Existing recreational marine activities are addressed in the existing conditions section as a component of the Marine Outdoor Recreation Subcomponent in the Land and Resource Use VC (Section 7.4). Marine activities undertaken at Camp Potlatch such as kayaking and canoeing will be included in this section.		
8	2-Jun-14	Kellie Leedham, on behalf of MoE and Mohr, Manager, Operations	Ministry of Environment- Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 39	Cumulative effects will be assessed for each assessment discipline where the residual effects from the Project could interact spatially and temporarily with the some residual effects from other identified Projects. This statement seems to define the scope too narrowly; effects on VCs may be substantial despite not being the same mechanism. Propose leaving "same" out. JF	Environmental Assessment Methods	Yes	Application Review	If the residual effect is the same, regardless of the mechanism, it will be considered in the cumulative effects assessment. For example, if there is a residual effect to water quality (e.g., turbidity) from logging activities, and a residual effect to turbidity from Project construction activities, the cumulative effect will be considered. Section 4.6.1 has been edited as follows (changes in red): Cumulative effects will be assessed for each assessment discipline where the residual effects from the Project could interact spatially and temporarily with the some residual effects from other identified Projects.		
9	7-May-14	James Davies, Regional Hydrologist	Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) - South Coast - Authorizations	dAIR	2.7 page 19	Concurrent Permitting The 2013 Project Description, page 60 has: WNLG anticipates applying for concurrent permitting, under BC's Concurrent Approval Regulation, for the following provincial permits and licences: LNG Facility Permit (BC Oil and Gas Activities Act); Water Licence (BC Water Act); and Waste Discharge Permits (BC Environmental Management Act). While the May 5, 2014, version 2.0, page 19, dAIR has: The Proponent does not anticipate applying for concurrent permitting, under BC's Concurrent Approval Regulation (BC Reg. 371/2002). The Proponent is pursuing synchronized permitting with the BC Oil and Gas Commission (OGC). Noted for change in permitting process.	Applicable Permits	No	Permitting Requirement OGC	WLNG acknowledges the comment and confirms that synchronized permitting with the OGC will be pursued.		

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10	26-May-14	Yara Notzantoniou, Regional Environmental Assessment Coordinator	Health Canada (HC)	dAIR	Table 5-1 (pg. 46)	With respect to assessing low frequency noise (vibration), HC suggests that the Proponent reference guidance from the American National Standards Institute (ANSI), 2005.	Atmospheric Sound	No	Application Review, Permitting Requirement OGC and Worksafe BC	Health Canada recommends considering American National Standards Institute (ANSI), 2005 when assessing low frequency noise (LFN), which indicates that the sum of the un-weighted noise levels in the 16 Hz, 31.5 Hz, and 63 Hz octave-bands should not exceed 70 dB. As the ISO 9613-2 based calculation algorithm that will be used to predict noise levels associated with the Project does not consider the 16 Hz octave-band, and noise source emission data is generally not available in the 16 Hz octave band, this calculation cannot be completed and will not be considered in this assessment. Instead, the noise assessment will consider the OGC British Columbia Noise Control Best Practices Guideline and Alberta Energy Regulator document Directive 038: Noise Control when assessing LFN.	
11	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	dAIR	5.5.4.3, Table 5.3 S12, S13	<p>Potential changes to baseline environment, incidentally identifies 'forest fire' as a potential impact from Climate Change. This and a bullet in Section 12 'Effects of the Environment on the Project' seem to be the only recognition of this risk. S. 13 includes fire hazard and abatement as a proposed environmental management plan.</p> <p>The proposed development area is surrounded by upland second growth forests which may pose a wildfire risk to Infrastructure and human life and safety during periods of low precipitation and summer high heat conditions. Proponent should recognize this risk and provide recommendations for fuel treatments to protect investment and to mitigate impacts to other values, such as surrounding forest values, air quality. BC FireSmart guidelines are available for reference.</p> <p>"Forest Fire" as a subject may be more appropriately described in Section 7.4, as "wildfire" is linked to Land and Resource Use (controlled burns may be used as a tool for ecosystem restoration e.g. "prescribed fire") and is managed in FLNR jurisdiction at the Sea to Sky District level. Where firebreaks are required (if supported by a more detailed assessment), identify whether/how much Crown forests may be impacted/cleared.</p> <p>In the development of an EMP for "Fire hazard and Abatement", proponent should consult with Sea to Sky Natural Resource District (Land & Resource Specialist, Protection Officer) to ensure expectations are clear, achievable, and supported by the regional fire centre who would respond in event of wildfire.</p>	Geomorphology and Natural Hazards (renamed Geotechnical and Natural Hazards) (also Land and Resource Use)	Yes		<p>WNLG acknowledges this comment and confirms that the risk for forest fires (wildfire) to be caused by the Project will be specifically addressed in Section 11 (Accidents and Malfunctions) and mitigation measures will be implemented as warranted. The potential for wildfires to affect the Project will be considered in Section 12 (Effects of the Environment on the Project).</p> <p>The bullet in Section 12 (Effects of the Environment on the Project) has been amended to read "Fire, including wildfires". At this time, it is not anticipated that Crown land will be required for firebreaks or other fire-fighting-related activities.</p> <p>WNLG confirms that ongoing consultation with agencies will be conducted in order to seek their input in subsequent planning phases of the Project. Prior to operation of the Project, the Liquefied Natural Gas Facility Regulation requires that WNLG prepare a Safety Loss and Management Program that complies with CSA 2275. This program includes a detailed Emergency Response Plan that includes documented emergency response plans, required equipment, training requirements, identification of trained personnel and plans for emergency drills and exercises.</p>	
12	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	Project Description	4.1.1	<p>Briefly notes vegetation clearance and firebreaks likely required, includes a detailed assessment of fuel types or specific management practices to reduce wildfire risk.</p> <p>The Sea to Sky Landscape Fire Management Plan (2014) indicates that the area is within a moderate fire risk zone, in the absence of LNG Infrastructure. This risk zone will likely become elevated to high or extreme when the values of proposed Infrastructure and hazards associated with the LNG facilities are included.</p>	Geomorphology and Natural Hazards (renamed Geotechnical and Natural Hazards), Environmental and Operational Environmental Management Plans	Yes	Application Review	<p>The Application will provide a comprehensive list and detailed descriptions of the approach and contents of the proposed environmental management plans (EMPs), which will include an EMP for Fire Hazard and Abatement. The EMPs will include identification of the mitigation measures.</p> <p>Section 12 has been amended as follows (changes in red):</p> <ul style="list-style-type: none"> • Fire, including wildfires, with an assessment of fuel types <p>Section 13 has been amended as follows (changes in red):</p> <ul style="list-style-type: none"> • Fire hazard and abatement, including specific management practices to reduce wildfire risk, with reference to the Sea to Sky Landscape Fire Management Plan (2014); 	
13	30-May-14	SCRD (David Rafael), Senior Planner	Sunshine Coast Regional District	dAIR		(h) Issues of Public Safety, for example being in an earthquake zone, be addressed;	Geomorphology and Natural Hazards (renamed Geotechnical and Natural Hazards)	Yes	Application Review	<p>Section 12 (Effects of the Environment on the Project) identifies the environmental factors deemed to have a potential effect on the Project, and WNLG confirms that this section will include earthquakes. This section will include the effects and/or consequences that may result from such an event and measures that are in place to minimize the effects.</p> <p>Section 12 has been amended as follows (changes in red):</p> <ul style="list-style-type: none"> • Natural seismic events, such as earthquakes, and associated effects, such as tsunamis, liquefaction, subsidence, and tsunamis 	

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14	2-Jun-14	Kelle Leatham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment- Protection, Oil & Gas/LNG Team	HAIR	Pg. 51	Table 5-3 Proposed study parameters for geomorphology and natural hazards. This table should also include the potential change to baseline & study/parameters for the removal of site overburden for site construction. The study parameters would be geochemistry and disposal options. JF	Geomorphology and Natural Hazards (renamed Geotechnical and Natural Hazards)	Yes	Application Review	Response to this question is in progress. It will be provided on July 25, 2014.	
15	26-May-14	Yota Hatzantonlou, Regional Environmental Assessment Coordinator	Health Canada	VC	Table 2 (pg. 15)	HC advises EAO that the "Site Contamination" intermediate component also provide a summary of any studies that may relate to country foods contamination, if applicable.	Site Contamination/ Public Health	Yes	Application Review	Section 5.7.1 has been updated as follows (changes in red): Site contamination was selected as an IC and will be summarized in the Application because there is a potential pathway for disturbance and mobilization of historical contamination during construction activities to affect ICs and VCs, including water quality, freshwater fish and fish habitat, and human health. Section 5.7.3 has been amended as follows: Information from this section will be cross-referenced to other ICs and VCs on the pathways of effect related to site contamination, as applicable: - Section 9.2 Public Health	
16	26-May-14	Yota Hatzantonlou, Regional Environmental Assessment Coordinator	Health Canada	HAIR	Table 4-9 (pg. 33), section 5.5.1.1 (pg. 52)	For the "Site Contamination" intermediate component, HC suggests that a rationale be provided for why the RAA is the same as the LAA. If there is any potential for the migration of contaminants beyond the Woodfibre property, HC suggests that a larger RAA be considered.	Site Contamination	Yes	Application Review	Section 5.7.1.1 (Spatial Boundaries) has been updated as shown below. Local Assessment Area: The Project Area Regional Assessment Area: Same as the LAA. WFP has committed to obtaining a BC MOE CDC prior to transferring the Woodfibre property to the Proponent. In order to obtain a CDC, the remediation must demonstrate that contaminants are not continuing to discharge into aquatic environments and demonstrate that existing contaminants left in situ and remediated to risk-based standards will not have adverse effects on the environment or human health.	
17	2-Jun-14	Kelle Leatham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment- Protection, Oil & Gas/LNG Team	VC	Appendix A, pg. 1	Site contamination should be a VC, not an IC. There are applicable regulations and guidelines for managing contaminated sites in BC. The Contaminated Sites Regulation, associated soil standards and applicable CDC conditions will be applicable for this site. The disturbance of contaminated soils and the potential environmental effects will have to be assessed. JF	Site Contamination	Yes	Application Review	Section 5.7.1 has been updated to include the following information. The application for a CDC from MOE requires inclusion of specific technical documents in support of the application. These include: Preliminary Site Investigation Report, Detailed Site Investigation Report, Human Health and Environmental Risk Assessment Report, Confirmation of Remediation Report, and a Performance Verification Plan. The quality of investigations, risk assessments and confirmation of remediation work are regulated. Supplemental to the requirements within the Environmental Management Act, the Contaminated Sites Regulation and the Hazardous Waste Regulation, MOE expectations are also clearly presented through published protocols and guidelines and enforced through a systematic building process. The Performance Verification Plan, which is required as a condition of issuance of risk-based CDCs, specifies future monitoring and inspection requirements as well as requirements should conditions change (e.g., new construction). The reports supporting the CDC application will be in BC MOE possession at the time of CDC issuance at which time they can be accessed by the public.	

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18	2-Jun-14	Cherily Needham, Director of Planning and Development Services	Squamish-Ulloet Regional District	VC	Environment of Pillar (Appendix A)	The spatial scope of the impacts of LNG gas beyond the site of the proposed facility. The study area should take into consideration all of BC, especially where the resource is being drilled and the land where the pipelines that transport this resource are located.	Site Contamination (Groundwater Quality)	yes	Application Review	The limits for the assessment of the scope of the Project are outlined in the Section 11 Order, Part B - Scope of the Proposed Project: 2.3 The following activities are not part of the proposed reviewable project for the purposes of this assessment: 2.3.1 Natural gas exploration and production activities; 2.3.2 The Eagle Mountain - Woodfibre Natural Gas Pipeline Project - north of Capilano Lake to Squamish that is subject of an order from the Environmental Assessment Office issued to FortisBC Energy (Vancouver Island) Inc. dated August 1, 2013; As indicated above, the pipeline that will transport natural gas to the proposed Woodfibre facility is being assessed as a separate project. Similarly, natural gas extraction projects are assessed separately. Cumulative effects will be assessed for each assessment discipline where the residual effects from the Project could interact spatially and temporally with the same residual effects from other identified Projects. Table 4-5 in the dAIR identifies the preliminary list of projects and activities that will be considered in the cumulative effects assessment. The Eagle Mountain - Woodfibre Pipeline Project has been added to Table 4-5.	
19	2-Jun-14	Kellie Leadham, on behalf of M&H Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 51, Section 5.5	Air quality should be listed as an endpoint. Soil disturbance, especially during construction, will emit or allow to emit contaminated soil into the air. The proponent should quantify the mass of particulate matter emitted via disturbance and wind-blown dust and the mass of any components in the contamination that may affect the environment. WM	Site Contamination	No	Application Review	WFP has committed to obtaining a COC from MDE prior to transferring the Woodfibre property to the Proponent. In order to obtain a COC, the remediation must demonstrate that contaminants are not continuing to discharge into aquatic environments and demonstrate that existing contaminants left in situ and remediated to risk-based standards will not have adverse effects on the environment or human health.	
20	2-Jun-14	Kellie Leadham, on behalf of M&H Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 52	Table 5-4 - Proposed study parameters for site contamination - parameters should also include contamination levels in aquatic biota. JP	Site Contamination	Yes	Application Review	Section 5.7.3 has been amended as follows (changes in red): The Application will consider potential Project-related changes to the Site Contamination IC as described in Section 4.0 Environmental Assessment Methods. Information from this section will be cross-referenced to other ICs and VCs, as necessary: - Section 5.7 Atmospheric Quality - Section 5.8 Surface Water Quality - Section 5.10 Marine Water Quality - Section 5.15 Freshwater Fish and Fish Habitat - Section 5.16 Marine Benthic Habitat - Section 9.2 Public Health Site contamination data will be included in a technical report that will be provided in an appendix. The Proponent is committed corporately and by statute and regulation (Environmental Management Act, Contaminated Sites Regulation) to the terms and conditions of the COC from MDE regarding future use, site activities, and on-going monitoring requirements.	
21	26-May-14	Yara Hatzantonlou, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC Table 2 (pg. 15) & dAIR Table 5-5 (pg. 54)	HC advises EAO that the parameters for the "Surface Water Quality" intermediate component also include any organic and inorganic contaminants of potential concern, if these have been identified in previous contaminated sites studies for the Woodfibre property. HC would prefer that this additional information be considered if there are any recreational or drinking water uses on/near the project site.	Surface Water Quality	Yes	Application Review	The following text has been added to Section 5.8.3 of the dAIR. Contaminants related to site contamination will not be included in this section because they are being addressed by others for the COC. Current site investigations are underway to study the potential effects that may be caused by disturbance and mobilization of historical contamination, and the potential effects are addressed through identified remediation strategies. WFP has committed to obtaining a COC from MDE prior to transferring the Woodfibre property to the Proponent. In order to obtain a COC, the remediation must demonstrate that contaminants are not continuing to discharge into aquatic environments and that existing contaminants left in situ and remediated to risk-based standards will not in future be re-mobilized. Section 5.7 Site Contamination of the Application will include a summary of the site investigation findings and conclusions.	

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22	2-Jun-14	Kellie Leadham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 54	Table 5-5 – Proposed study parameters for surface water quality – Other water quality parameters (including pH, TSS, TDS, turbidity, dissolved oxygen, hydrocarbons, ammonia, nitrate, nitrite, total metals, major anions and cations, historical contaminants) that may be affected by the Project need to be included in the assessment, as turbidity is not the only parameter that could be affected by this development. (i.e., pg.54 “there is potential pathway for disturbance and mobilization of historical contamination during construction activities to affect ICs and VCs, including water quality and freshwater fish and fish habitat.” Site appropriate parameters will require evaluation.) JF	Surface Water Quality	Yes	Application Review	Please see the response to Comment #21 for water quality parameters related to site contamination. Table 5-7 has been updated to include the following parameters: - Total suspended sediment - pH - Water temperature - Conductivity - Dissolved oxygen - Nutrients	
23	2-Jun-14	Kellie Leadham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 62	Table 5-15 Potential adverse effects and proposed indicators for freshwater fish and fish habitat – Water quality needs to be a VC (see comments above). Other water quality parameters (including pH, TSS, TDS, turbidity, dissolved oxygen, hydrocarbons, ammonia, nitrate, nitrite, total metals, major anions and cations, historical contaminants) that may be affected by the Project need to be included in the assessment, as turbidity is not the only parameter that could be affected by this development (i.e., pg.51 “there is potential pathway for disturbance and mobilization of historical contamination during construction activities to affect ICs and VCs, including water quality and freshwater fish and fish habitat.” Site appropriate parameters will require evaluation.) JF	Water Quality, Freshwater Fish and Fish Habitat	Yes	Application Review	Section 5.8 [Surface Water Quality] will present the water quality data available for the Project, except water quality parameters for contaminants of concern from previous site contamination, which will be presented in Section 5.7 [Site Contamination]. Section 5.15 will cross-reference the water quality data presented in Section 5.8 [Surface Water Quality] as relevant. Section 5.15.2 has been updated to include the following text: Consideration of water quality of surface water to characterize baseline conditions. Water quality data will be presented in Section 5.8 Surface Water Quality and cross-referenced in this section. Water quality variables of temperature, dissolved oxygen, pH, and conductivity will be reviewed as part of fish habitat assessment (see Table 5-14). Please see response to Comment #21 for water quality parameters related to site contamination.	
24	2-Jun-14	Kellie Leadham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	VC	Appendix A, pg. 2	Proposed VC as follows: Water Quality (surface and groundwater - water quality defined as water chemistry, benthic invertebrates etc.). (i) Surface Water Quality -Rationale: Water effluent from the LNG facility; BC regulatory requirement (need to obtain a Waste Discharge Permit for facility water effluent) and may require registration under Municipal Wastewater Regulation for sewage treatment effluent -Project Effects: Change in water quality in Howe Sound or along the shipping route (Draft Site-Specific Water Quality Objectives have been developed for Howe Sound) -Measurable Parameters: Parameters of concern (e.g. temperature, full water chemistry) (ii) Groundwater Quality -Rationale: Groundwater table is likely shallow and could ultimately reach surface waters rapidly. -Project Effects: Change in groundwater quality affecting other water users (drinking water users?, fish, wildlife) -Measurable Parameters: Parameters of concern - Indicative of industrial contaminants (e.g., hydrocarbons, EPH, BYDX, glycol, metals).	Water Quality (Surface and groundwater)	Yes	Application Review Permitting Requirement (OEC)	The Application will present surface water quality as an IC as it is a consideration for the assessment of receptor VCs, including freshwater fish and fish habitat. The following responses provide context for the consideration of the bullet points (i) to (iv): (i) Surface water quality: There will be no discharge to surface water as a part of the Project. Process water, waste water and storm water will be treated and discharged to the marine environment. WNLNG's understanding of the permitting process is that the OGC will issue the Waste Discharge Permits (including air emissions, effluent discharges, and refuse disposal). WNLNG has not seen the draft Site-Specific Water Quality Objectives for Howe Sound. Would the MOE be able to provide the draft copy? (ii) Site contamination data (including groundwater) will be included in a technical report that will be provided in an Appendix. The Proponent is committed separately and by statute and regulation (Environmental Management Act, Contaminated Sites Regulation) to the terms and conditions of the COC from MOE regarding future use, site activities, and ongoing monitoring requirements. WFP has committed to obtaining a COC from MOE prior to transferring the Woodfibre property to the Proponent. In order to obtain a COC, the remediation must demonstrate that contaminants are not continuing to discharge into aquatic environments and demonstrate that existing contaminants left in situ and remediated to risk-based standards will not have adverse effects on the environment or human health.	

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						<p>(iii) Acidification Effects (potential effect if electric drive is not used)</p> <p>-Rationale: Project may have air emissions of acidifying compounds that could deposit on freshwater surfaces.</p> <p>-Project Effects: Acidification & eutrophication for freshwater (rivers, streams and lakes).</p> <p>-Measurable Parameters: Critical loads modelling and mapping (water chemistry, including base cations, pH, acidity, alkalinity, ANC).</p> <p>(iv) Eutrophication Effects (potential effect if electric drive is not used)</p> <p>-Rationale: Eutrophication of water bodies.</p> <p>-Project Effects: Ecosystem alteration, Loss of salmonids fish</p> <p>-Measurable Parameters: Diatom assemblage change in lakes, water chemistry changes, others</p>				(iii) and (iv) Acidification and eutrophication effects are not anticipated as an electric drive will be used.	
25	2-Jun-14	Kelie Loedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, OI & Gas/LNG Team	VC	Appendix A, pg. 2	Surface water quality (freshwater & marine) should be VCs (rationale provided in memo to the EAO).#F	Surface Water Quality, Marine Water Quality	Yes	Application Review	<p>WNLN agrees that water quality is a critical resource that fits a number of the attributes of a VC. "Intermediate components (ICs) are components of a larger effects pathway for a related or more appropriate VC. They generally meet the criteria for a VC, and studies and results will be presented in the Application as technical information to inform the assessment of other VCs." Each IC section will present existing conditions, potential interactions with Project activities and future conditions with the Project.</p> <p>In addition to the comments below, please see changes to the wording in Section 5.7.3 as described in response to Comment #20 and 5.8.1 as described in response to Comment #21.</p>	
										<p>Surface water quality: Baseline information on surface water quality will be collected and presented in Section 5.8, and potential changes to water quality as a result of Project activities will be reviewed in relation to regulatory thresholds for VC receptors. If the potential for a change is identified, the potential for a residual effect will be assessed in the section for the VC receptor with the water quality thresholds for that receptor. Identified VC receptors for surface water quality include amphibians, freshwater fish and fish habitat, and public health.</p>	
										<p>There are no discharges to surface water. Standard best management practices for erosion prevention and sediment control will be presented in the section and/or included in the Construction Environmental Management Plan, under the purview of an Environmental Monitor and sampling for water quality parameters associated with activities that may cause sedimentation. In addition, potential accidents and malfunctions that may affect surface water quality will be addressed in Section 11 (Accidents and Malfunctions).</p>	
										<p>Marine water quality:</p> <p>Baseline information on marine water quality will be presented in Section 5.10, and potential changes to marine water quality as a result of Project activities will be reviewed in relation to the regulatory threshold for VC receptors. If the potential for a residual effect is identified, the potential residual effect will be assessed in the section for the VC receptor with the water quality thresholds for that receptor.</p> <p>Potential changes to marine water quality include changes to water chemistry and the thermal regime. Mitigation measures during construction will also be included in the CEMP for erosion prevention and sediment control. If there are anticipated residual effects to the receptor VCs after mitigation measures are applied, they will be included in the relevant environmental management plans. In addition, potential accidents and malfunctions that may affect marine water quality will be addressed in Section 11 (Accidents and Malfunctions).</p> <p>Section 5.10.1 has been amended as follows:</p> <p>Information related to marine water quality will be presented in this section of the Application and cross-referenced in the applicable VC sections (e.g., Section 5.16 Marine Benthic Habitat). Section 5.10 of the Application will also include an analysis of the changes to marine water quality as a result of the Project.</p>	

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26	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 23	Table 4-1 List of Values Components and Technical Components – Surface water and marine water quality should be VCs. JF	Surface Water Quality, Marine Water Quality	Yes	Application Review	Please see response to Comment #25.	
27	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 53	"It is anticipated that the Project will use an existing permitted wastewater treatment system, which will be replaced during construction." A registration under the Municipal Wastewater Regulation may be necessary for sewage treatment effluent. If the current capacity increases by more than 10% of the existing permitted facility. According to the project details, it appears that a waste discharge permit to release LNG process water and/or water discharge from condensate blow-down may also be necessary. Having baseline information on water quality and a description of the predicted effluent discharge, will be critical factors for BC MoE to conduct an assessment of the project information and subsequently support issuing a waste discharge permit. JF	Surface Water Quality	Yes	Permitting Requirement OGC	W/LNG will obtain the required permits pending issuance of an SA certificate. Baseline information on water quality will be presented in Section 5.8. Preliminary information on treated discharges will be presented as a component of the Project Description in Section 2.2.5. Please note that there will be no discharges to fresh water. Please note that waste discharge permitting for the Project will be handled by OGC.	
28	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 54	Marine contaminant levels in the study area, also needs to be included. What field surveys are planned for this assessment? The MoE has currently drafted site-specific water quality objectives to protect and manage water quality in the Howe Sound watershed. In the future, these objectives would be applicable for this area. JF	Water Quality	Yes	Application Review	Water quality parameters for contaminants of concern from previous site contamination will be presented in Section 5.7 (Site Contamination), and if present, managed through the COC requirements. Section 5.10.3 of the dAIR has been edited to include the following text: If any changes to marine water quality are anticipated as a result of existing contamination and Project activities, these changes will be cross-referenced in this section.	
29	7-May-14	James Davies, Regional Hydrologist	MFLNRO - South Coast - Authorizations	VC	Surface Water – Quantity, Table 2, page 13	Several Water Licences are appurtenant to DL 2351, the location of the proposed project. As of May 2, 2014, our water licensing system shows these water licences are held by Western Forest Products Inc., for industrial (pulp mill) and Waterpower purposes. The December 2013 Woodfibre LNG Project Description does not explain that the water licensee has intentions of transferring all, or part, or none, of his water rights to Woodfibre LNG. However, the dAIR (page 55), states there will be a transfer of water rights, but it is not clear whether this means all, or part, of the current water licences. Western Forest Products Inc. are not listed in Table 10 as a Stakeholder in Section 9.3 of the December 2013 Project Description. It is noted that Western Forest Products issued a news release in January 2013, stating that they had entered into a conditional agreement for the sale of its former Woodfibre Pulp Mill site. These types of amendments are initiated by the water licensee, or the landowner. These amendments would need to be approved by the Decision Maker under the Water Act. As of May 2, 2014, our water licensing system shows the water licences appurtenant to DL 2351 are not under amendment. There are current Water Rights on the project land. The existing water licences could be amended by a change of works, a change of licensee, or a change of purpose. If DL 2351 was subdivided, the water licences appurtenant to this land would be subject to an apportionment. This means a new water licence application may not be needed, as a current licence could be used – if it was amended. To make an assessment of available water versus licensed demand on Woodfibre Creek and on Mill Creek, the present water rights and applicants on the streams need to be confirmed, and any future transfer of apportionment, apportionment, or amendments identified. VC, version 2.0, April 30, 2014 dAIR, version 2.0, May 5, 2014	Surface Water Quantity	Yes	Permitting Requirement OGC	We understand that the existing water licences will be transferred from Western Forest Products upon transfer of the appurtenant land parcels to W/LNG. W/LNG will update the licences as needed with OGC, as part of the permitting process.	

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30	7-May-14	James Davies, Regional Hydrologist	MFLNRD - South Coast - Authorizations	dAIR	5.7.1 page 54	<p>The dAIR does not provide a review of the water licences appurtenant to the land.</p> <p>dAIR, page 55: The licences are to be transferred by the water licence to the proponent, and utilized during the construction and operation of the project.</p> <p>This is not complete information on the water licences as to determine the required amendments. Additional information would be required as the Decision Maker for approving a change of works, a transfer of water rights, or a change of purpose, has to consider whether an existing water licence or applicant for a water licence may be adversely affected, when the Decision Maker makes his adjudication on the proposed change or amendment.</p> <p>For example:</p> <ul style="list-style-type: none"> • If a water supply (intake was constructed on Mill Creek (dAIR, page 12), could this affect a licensee or an applicant? • Would there be any changes to the Henfote Lake or the Sylvia Lake storage works? • What would happen to the water power licences? <p>The application needs to explain the current water licences and applications on Woodfibre Creek and on Mill Creek, and how some, or all, of these licences would be changed for the project.</p> <p>dAIR, version 2.0, May 5, 2014</p>	Surface Water Quantity	Yes	Permitting Requirement OGC	<p>All water licences on Mill Creek and Woodfibre Creek are held by Western Forest Products and appurtenant to DL 2351. Accordingly, we anticipate that all water licences will be transferred to WFLNG upon the transfer of DL 2351. WFLNG will work with the OGC during the permitting phase to ensure all water licences are amended as required.</p> <p>Text in dAIR was revised for clarity:</p> <p>Existing water licences for withdrawal of water and for power production on Woodfibre Creek and Mill Creek are appurtenant to the land that will be transferred to the Proponent and will be transferred with the land.</p> <p>In addition, Section 2.7 (Applicable Permits) will list the permits that will be required for construction, operation and decommissioning of the Project.</p>	
31	2-Jun-14	Katlie Leadman, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 55	<p>5.7.2 Existing Conditions – First sentence, there appears to be a typo surface water "quality" should be "quantity". If</p>	Surface Water Quantity			<p>WFLNG acknowledges this comment, and has corrected Section 5.9.3 (formerly 5.7.2). First paragraph (correction in red): This section will provide information on the existing surface water quantity conditions, which will be characterized by the following:</p>	
32	2-Jun-14	Katlie Leadman, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	VC		<p>Proposed VC as follows: Water Quantity</p> <p>Rationale: Project may have water licence requirements (need to obtain a licence for water use under the Water Act). How much water would be necessary for water cooling? What is the effect on the water chemistry & aquatic resources?</p> <p>-Project Effects: Water use requirements from the facility may have an effect on other water users - decrease in surface flows.</p> <p>-Measurable Parameters: Hydrometric data - surface flows, groundwater levels & flow direction. If</p>	Water Quantity	Yes	Application Review and Permitting Requirement (OGC)	<p>Water quantity is included as an IC as it is an intermediate consideration for assessment of effects, to receptor VCs such as freshwater fish and fish habitat.</p> <p>Section 5.9.1 has been amended as follows: Information related to surface water quantity, including an analysis of potential changes to surface water quantity, will be included in the Application. A comparison between expected project water demand and estimated average and low streamflow in Mill Creek and Woodfibre Creek. Where applicable, VCs on the pathway of effect related to changes in surface water quantity will cross-reference this section.</p> <p>Seawater will be used for cooling.</p> <p>Permitting requirements will be summarized in Section 2.7 (Applicable Permits) and addressed with the OGC at the time of transfer of the land and appurtenant water licences. All active water licences on Mill Creek and Woodfibre Creek belong to WFP.</p> <p>It is not anticipated that groundwater quantities or flow directions would be impacted by Project water demands on a watershed scale.</p>	
33	26-May-14	Yola Hatzilantonlou, Regional Environmental Assessment Coordinator	Health Canada	VC	VC: Table 2 (pg. 15) & dAIR: Table 5-7 (pg. 58)	<p>HC advises EAO that there appears to be a discrepancy in the parameters listed for the "Marine Water Quality" intermediate component (IC) presented in the VC document, versus the dAIR. HC prefers that any organic and inorganic contaminants of potential concern be considered for this IC – especially if there are any recreational and fishing uses near the project site.</p>	Marine Water Quality	Yes	Application Review	<p>Table 5-9 in the dAIR has been updated to be more specific regarding the concentrations of biological and chemical contaminants of potential concern associated with treated process water, wastewater and stormwater discharges.</p> <p>Table 5-9 includes the following parameters: suspended sediment, turbidity, temperature, total residual chlorine, nutrients, metals, hydrocarbons, dissolved oxygen, pH and conductivity.</p> <p>Targeted dredging in the area has already removed some of the legacy contaminants from sediments; however, results indicate remaining sediments in other parts of the Project area contain dioxins and furans, which can be remobilized into the water if sediments are disturbed. These contaminants will need to be included in the assessment and have been added to Table 5-9.</p>	

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34	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 57	Marine water quality needs to be a VC, particularly since the Project will have a surface discharge that will require an effluent permit under the <i>Environmental Management Act</i> . In addition to baseline water quality, a description of the predicted effluent will be required. Important information to include for the Aquatic Environment Assessment: Map and compile information on operations or activities that discharge contaminants to surface waters: a) locations of current and proposed permits that allow a wastewater to be discharged to a surface water; b) locations of current and proposed discharges to surface water regulated by a Code of Practice or a Regulation under an Act of the Legislature; c) any locations of current and proposed discharge of storm water or other unregulated discharges from a land surface; d) identify any sensitive habitats or species of concern that may be affected by the proposed construction and operation of the project; e) identify predicted impacts to aquatic resources from proposed construction and operation including aquatic sediments and benthic environments. <i>JP</i>	Marine Water Quality	Yes	Application Review and Permitting Requirement (OGC)	Marine water quality is an IC, as it is a consideration in the pathway for the assessment of receptor VCs. WLNG confirms that information needs to be outlined in the comment (bullet points a) to e)) will be included in the EAC Application; however, we note that the effects to sensitive habitats and aquatic resources will be assessed in the relevant VC sections, supported by the Marine Water Quality IC. A preliminary description of the treated effluent discharges will be presented in the EAC Application, and detailed information will be provided to the OGC as needed for permitting phase. The following text was added to Section 5.10.1 of the dAIR: Information related to marine water quality will be presented in this section of the Application and cross-referenced in the applicable VC sections (e.g., Section 5.16 Marine Benthic Habitat). The following text was added to Section 5.10.3 of the dAIR: The details of the numerical dispersion models for the seawater cooling system, including methodology and results, will be presented in a technical report appended to the Application.	
35	26-May-14	Yota Hatzilantonlou, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC: Table 1 (pg. 10), Appendix A (pg. 1) & dAIR: Table 4-1 (pg. 26), Table 5-8 (pg. 60)	For the "Atmospheric Environment" VC, HC advises EAD that the Proponent also include H2S, ozone, and metals (as applicable) in the VC/AIR/Application documents, along with the other criteria air contaminants (CACs) indicated. Otherwise, HC advises that the Proponent provide a strong justification for any CACs that are not being considered in the air quality assessment (e.g., H2S, ozone etc.). It is HC's understanding that the Province of BC has developed 'Interim' AAQOs for 1-hr NO2 and 1-hr SO2 (to be officially released at a later date), and that these are below the current published objectives for NO2 and SO2. HC suggests that the Proponent undertake an analysis of predicted concentrations of NO2 and SO2 against both the Interim BC objectives and/or the objectives of other jurisdictions (e.g., World Health Organization), as may be applicable. This advice is provided in anticipation of lower NO2 and SO2 objectives being in effect during Project construction/operation, and with the expectation that these lower objectives will be more protective of human health. Finally, HC suggests that a full inventory be provided of all potential air pollutants, including any refrigerants, solvents or other process chemicals (and their by-products) that may be vented, combusted, or accidentally released into the atmosphere. This would enable a better understanding of surrounding population exposure and potential risk.	Atmospheric Environment (Air Quality)	yes	Application Review and Permitting Requirement OGC	The effects assessment will consider relevant emissions based on Project-specific engineering data on air emissions. We are aware of the forthcoming NO2 and SO2 BC air quality standards, but understand that they have not currently been released by the MoE. Those criteria will be considered within the effects assessment, if they are available within a time period that permits inclusion in the effects assessment. The potential for fugitive emissions and emergency scenarios will be considered within the effects assessment. The following text has been added to Section 5.2.3 of the dAIR: The air quality effects assessment will consider ground-level ozone as well as H2S (should H2S be emitted from the Project). Based on discussions to date with the MoE on the conceptual model plan, the potential Interim BC SO2 and NO2 ambient air criteria will be considered in the effects assessment. However, we don't recommend any change to the AIR, since the potential new criteria under consideration have not been made available to the public yet.	
36	26-May-14	Yota Hatzilantonlou, Regional Environmental Assessment Coordinator	Health Canada	dAIR	Section 5.9 (pg. 58) – general comment	As part of the "Atmospheric Environment" VC, HC advises EAD that the Proponent assess an additional "emergency flaring/back-up power generation" scenario. The current assessment steps for this VC do not capture this potential scenario – the results of which would help to characterize potential adverse effects to humans.	Atmospheric Environment (Air Quality)	yes	Application Review	The following text has been added to Section 5.2.3 of the dAIR: The Application will consider emissions to air from the LNG facility, including emergency scenarios undertaken for the Project operation phase, and associated shipping activities.	
37	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team			If electric drive is not the selected emission technology, air emissions can potentially cause acidification and eutrophication effects in the project area. Additional information would be required for the environmental assessment, including a screening level assessment to determine whether a level 1 critical load assessment employing models is required as documented in the Draft Critical Loads Screening Chart (see attachment 1). Additional VCs would include freshwater lakes, streams, soils and vegetation. <i>JP</i>	Atmospheric Environment (Air Quality)	No		WLNG confirms that the plant will use an electric drive. Onsite generators will be used for back-up power to run all emergency power and safety systems.	
38	2-Jun-14	Kimberly Needham, Director of Planning and Development Services	Squamish-Lillooet Regional District	dAIR VC	5.9.1, pg. 53 Environmental Pillar, Section 7.5 Visual Quality (Appendix A)	Potential for smog/vog will impact other VC – socio/economic as it could impact tourism or tourist related activities.	Atmospheric Environment (Air Quality) and Visual Quality	yes	Application Review	Where appropriate, the changes to the Atmospheric Environment (Air Quality) VC will be carried forward into the assessment of receptor VCs. Section 7.5.3 has been amended as follows: 'Where appropriate, the changes to the Atmospheric Environment (Air Quality) VC will be carried forward into the assessment of the Visual Quality VC (e.g., the potential for the Project's emissions to result in a degradation of the visual quality.'	
39	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 31	Table 4-2 – Air Quality should be listed as a VC in this table. <i>JP</i>	Atmospheric Environment (Air Quality)	Yes -	Application Review	The text in this table has been changed to read 'Atmospheric Environment (Air Quality)' and is a VC.	

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40	2-Jun-14	Kellie Leachman, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 33	Table 4-3 – Regional study area boundaries. Atmospheric environment should explicitly include air quality as a VC. If	Atmospheric Environment (Air Quality)	Yes	Application Review	The text in this table has been changed to read 'Atmospheric Environment (Air Quality)' and is a VC.
41	2-Jun-14	Laura Guzman, Policy Analyst	Climate Action Secretariat	dAIR	Tables 4-1 List of Value Components and section 5.10.3	List of value components should specify all greenhouse gases included in the reporting regulations: CO ₂ , CH ₄ , N ₂ O, PFCs, HFCs, and SF ₆ .	Greenhouse Gas Management	yes		The assessment will consider all significant sources of GHG emissions. There are not expected to be any significant sources of PFCs, HFCs, and SF ₆ . Table 5-2 in the dAIR has been updated to specify all greenhouse gases included in the reporting regulations.
42	2-Jun-14	Laura Guzman, Policy Analyst	Climate Action Secretariat	dAIR	Section 5.10 and 5.10.3	GHG emissions must be calculated using the methodology described in the reporting regulations in the Greenhouse Gas Reductions Target Act (Cap and Trade). As well, any deforestation, if any, that occurs as part of the construction of the facility, must be included and GHG emissions estimated according to guidelines provided by Ministry of Forestry, Lands and Natural Resources	Greenhouse Gas Management	yes		GHG emissions will be calculated using commonly accepted methods. This will include quantification methods described in the reporting regulations in the Greenhouse Gas Reductions Target Act (Cap and Trade). Loss of carbon sink due to any deforestation will be quantified using the guidelines provided by MFLNRO. The following changes have been made to Section 5.3.3 (changes in red): In addition, the annual GHG emissions from the Project will be estimated for the Project operation phase, using the methodology described in the reporting regulations in Greenhouse Gas Reductions Target Act (Cap and Trade), and other commonly accepted methods where a methodology is not provided in the reporting regulations. Loss of carbon sink due to any deforestation will be quantified using the guidelines provided by MFLNRO. Emissions will be compared to the provincial and national emissions to assess the relative contribution of the Project on a Canadian basis. Emissions during the construction and decommissioning phases will be considered as a bounding conditions to the operation phase.
43	2-Jun-14	Laura Guzman, Policy Analyst	Climate Action Secretariat	dAIR	Section 5.10.3	This section must include the provision of a GHG Management plan including mitigation measures for construction, operation and decommission phases of the project. Currently this section describes characteristics of GHG assessment, but it does not consider the provision of a GHG Management plan and mitigation measures	Greenhouse Gas Management	yes		GHG mitigation and management measures will be included in the GHG/Climate Change effects assessment. Section 5.3.3 has been amended as follows: This section will include a summary of GHG mitigation and management measures applicable to the construction, operation and decommissioning phases of the Project.
44	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	dAIR	5.11.1, 5.13	Vegetation Communities. Can forest health of surrounding forest types and ecosystems be monitored where they may be susceptible to natural gas venting or other industrial activities. Forest health should be monitored over long term to determine whether any change is detected. 5.13 lists wildlife/vegetation as a proposed monitoring plan.	Vegetation Communities	yes		The Project does not include venting natural gas. As such, monitoring of forest health specific to venting has not been considered. Section 5.11.4 has been amended as follows: In the event that the assessment identifies the potential for residual effects of the Project on local and regional vegetation communities, details of a long-term vegetation monitoring program will be included in the Wildlife and Vegetation Monitoring Plan (Section 13 Summary of Proposed Environmental and Operation Management Plans).
45	2-Jun-14	Scott Barrett, Manager Resource Stewardship	FLNRO - South Coast Region	VC	5.12 Avifauna VC p.65	Project is within the suspected range for Northern Goshawk (<i>Accipiter gentilis</i> sp.) It is unclear why it was not selected as a VC?	Avifauna		Application Review	Northern goshawk (<i>Accipiter gentilis laingi</i>) was assessed for consideration as a VC and subsequently excluded as the species is not expected to occur, or be affected by, Project development. There is no suitable goshawk habitat within the Project area and there are no anticipated Project-related effects as there is no anticipated forest clearing within any suitable goshawk habitat. There are four proximal northern goshawk detections at McNab Creek, Furry Creek, Red Tusk Creek and Clowhom Lake. However, none of these sites have recent confirmed activity; all sites are currently considered extirpated. Draft recovery habitat has been mapped (CWS 2012) to provide species-specific management at three of these sites, however, all mapped habitat is >30km from the Project boundaries.

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46	2-Jun-14	Scott Barrett, Manager Resource Stewardship	FLNRO - South Coast Region	VC	S.12 Avifauna VC p.65	Project is potentially within range for Northern Spotted Owl; it is unclear why it was not selected as a VC?	Avifauna		Application Review	Northern spotted owl (<i>Nyctalestus californicus</i>) was assessed for consideration as a VC and subsequently excluded as it is not expected to occur, or be affected by, Project development. The nearest proximal spotted owl detections are at: 1) Enchantment Creek (Capilano Watershed); this site was detected as occupied between 1992 and 2001. This site is currently considered to be extirpated. 2) Sheba Creek (Seymour Watershed); This site was considered active with the only two detections recorded in 1992. This site is currently considered to be extirpated. The project boundary abuts Wildlife Habitat Area (WHA) 2-517 (Tantalus WHA), approved in March 2013. This WHA is intended to provide future recovery habitat for spotted owls; however, the species is regionally considered as extirpated and there have never been any recorded spotted owl detections within this adjacent WHA. In addition, the project area contains very little (~2%) suitable spotted owl habitat (based on the model developed by J.Hobbs and endorsed and used by the Ministry of Forests, Lands and Natural Resource Operations (MLNRO) for spotted owl recovery planning) and there is little/no anticipated forest clearing within any suitable forest habitat during Project construction and/or operation.	
47	2-Jun-14	Scott Barrett, Manager Resource Stewardship	FLNRO - South Coast Region	VC	S.12 Avifauna VC p.65	Project is within range for Great Blue Heron; it is unclear why it was not selected as a VC?	Avifauna		Application Review	Great blue heron (<i>Ardea herodias</i>) was assessed for consideration as a VC and subsequently excluded as its habitat is not expected to be affected by Project development. 1) Nesting habitat value: There are no confirmed heron rookeries documented in the provincial (non-sensitive) Conservation Data Center database; potential suitable nesting habitat is also not likely present within the Project area. 2) Foraging habitat value: Existing shoreline foraging habitat has been altered by previous development and is not likely to be further detrimentally impacted during Project construction or operation. Great blue heron will be assessed within the Marine Birds VC for potential effects associated with shipping and other non-habitat effects.	
48	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment- Environmental Protection, Oil & Gas/LNG Team	VC		Dredging Activities – Will material need to be dredged and removed for the project? Dredging activities could result in changes in historical contaminants in marine country foods (i.e. dioxin/furan concentrations). JF	Marine Habitat	Yes	Application Review	The following text has been added to Section 5.7.1: It is not currently anticipated that dredging will be required for the Project. If detailed design reveals that dredging will be required, this information will be included in the Application. The site is currently undergoing remediation, including dredging in selected areas, and a certificate of compliance (COC) will be obtained prior to VLNG acquiring the site. VLNG will be required to comply with all of the conditions and monitoring requirements of the COC.	
49	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment- Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 30	Marine corridor includes the shipping route plus 1km buffer either side, from Project area through Howe Sound. The assessment area should include the full width of the marine corridor through Howe Sound, particularly for marine aquatic effects; 1km around the shipping route is not enough for marine mammals. JF	Marine Habitat	Yes	Application Review	The marine corridor was defined for purposes of clarity in the descriptions for the assessment areas. The assessment areas (LAA and RAA) were described for each VC, and, depending on the VC, may include the marine corridor or a larger area such as Howe Sound.	
50	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment- Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 33	Table 4-3 – Marine Habitat corridor should include all of Howe Sound, not only 1km around the shipping route. JF	Marine Habitat	Yes	Application Review	The identified potential interactions between marine benthic habitat and the Project are related to the Project's shoreline activities and potential loss of habitat in the Project area, thus the LAA includes the Project area. Interactions with Project shipping activities in the marine corridor are not anticipated. The RAA has been revised to include Howe Sound as well as the marine corridor.	
51	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment- Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 51	The RAA for the Marine Mammals assessment is the area in which the project affects water quality and would be too localized for a regional assessment. This RAA should include the full width of the marine corridor through Howe Sound. JF	Marine Mammals	Yes	Application Review	The LAA for Marine Mammals has been revised to include the Project area and the marine corridor, and the RAA has been revised to include Howe Sound.	

Comment ID#	Date Submitted	Submitter Name and Role	Agency/Affiliation	Comment Refers to Draft VC Selection or dAIR?	Relevant section and page number	Comment/ Issue Description/ Suggested Changes	Category/ Theme	Consent to this draft VC selection/dAIR required?	Application Review and/or Permitting Review/consent?	Proposed Response	dAIR Round 2 – Due August 11, 2014
52	2-Jun-14	Kelle Leadham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR VC	dAIR-Pg. 27 VC-Appendix A, pg. 3	Table 4-1 – Marine Benthic Habitat VC needs to include marine tissue concentrations. How will the project activities affect marine tissue concentrations? This component seems to be missing from the public health section as well.	Marine Benthic Habitat (and Public Health)	Yes	Application Review	Crab tissues have been collected in 2014 to support the public health assessment. Mussels were not available adjacent to the site. Marine fish tissue samples have also been collected as part of the studies to support a CDC. Marine tissue concentrations will be addressed within the Public Health VC assessment and referred to within the Marine Benthic Habitat VC section of the Application as necessary. The following text has been added to Section 5.16.3 of the dAIR: Where applicable, VCs on the pathway of effect related to changes in marine benthic (e.g., forage fish and other fish (marine), public health) will cross-reference this section.	
53	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	VC	Labour Market 6.2 P.96	New employment might create local labour shortages that could result in wage inflation, forcing up costs for local businesses, especially if there are other projects that are underway at the same time and may be competing for the same labour (cumulative effects). If the demand for labour exceeds the available local supply, the importation of workers might place additional demands on community infrastructure and services and could affect the overall structure of local communities. There should be an analysis done on mitigation measures to combat these labour shortages and to identify those industries at risk.	Labour Market	Yes	Application Review	WLLG confirms that potential effects of the Project on the local labour market will be assessed. Section 6.2.3 of the dAIR has been revised as follows (changes in red): The assessment will identify and evaluate potential adverse and beneficial effects on the labour market during the construction, operation, and decommissioning phases, including labour shortages and identification of those industries most at risk. Potential effects that will be assessed include...	
54	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	VC	Labour Market 6.2 P.97	Additional wages can create negative effects if incremental wages are inappropriately spent. An analysis of how social service agencies and other community support groups will be engaged to mitigate increased disposable incomes.	Labour Market	Yes	Application Review	Section 6.2.3 of the dAIR has been revised as follows (changes in red): Where adverse effects associated with changes in the labour market are identified, mitigation measures will be specified.	
55	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		c) Sustainable Economy Valued Components (VC): (i) There may be impacts/benefits for SCRD, Town of Gibsons and Islands Trust areas. Thus the draft AIR should make reference to SCRD and Islands Trust. Reference is made to the Howe Sound area being the regional area for the marine portion under the economy heading. This should be amended to refer to the SCRD, Islands Trust (Gambler Island Local Trust specifically) and Town of Gibsons.	Sustainable Economy		Application Review	The LAA for the Labour Market and Regional Economic Development VCs includes Squamish, Resort Municipality of Whistler, Squamish First Nation communities and Metro Vancouver, as they are the local areas that will be drawn upon for labour and goods and services for reasons of proximity and access to the Project site. Gambler Island, Port Mellon and Gibsons are considered within the context of "Howe Sound" for marine commercial use. Regional effects to marine commercial use are not foreseen for the rest of the Sunshine Coast. The RAA references all of British Columbia, as other communities within a regional context will be cited in the RAA baseline.	
56	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		(ii) Commercial marine use is a significant sub-component and impacts on SCRD area (specific reference to Hillside Industrial area), Gambler Island Local Trust and the Town of Gibsons as areas that should also be noted for consideration/study.	Sustainable Economy			The assessment of potential Project effects on the Commercial Marine Use VC is focused on water-based activities, including docking. The RAA references all of Howe Sound, as other communities within a regional context will be cited in the RAA baseline.	
57	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		(iii) There may be scope for other locations to provide workforce and other ports/docks could be used for worker/material transport. The draft AIR should include reference to considering/reviewing additional locations.	Sustainable Economy			The LAA for the Labour Market and Regional Economic Development VCs in the dAIR has been amended to include Electoral D of the Squamish Lillooet Regional District.	
58	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	VC	6.3 Sustainable Economy P.98	Municipal governments may be faced with costs to accommodate any incoming population associated with the Project or to upgrade any public infrastructure that may be affected by project-related activities. An analysis regarding the municipal resource expenditures relative to estimate taxes levied on the site need to be developed.	Sustainable Economy			WLLG confirms that potential effects of the Project on local government revenues and expenditures (both from direct Project use and use by Project employees) will be assessed.	
59	2-Jun-14	Kimberly Needham, Director of Planning and Development Services	Squamish-Lillooet Regional District	dAIR VC	6.0, Page 95, 104 (Social and Economic Pillars, Appendix A)	Spatial Boundaries – The Howe Sound and other local, unincorporated communities should be included LAA of the Economic and Social Effects (It's not simply SURD). Communities like: Porteau Cove, Furry Creek, Britannia Beach, Upper Squamish Valley, Paradise Valley, Black Tusk and Pineridge Estates.	Regional Economy and Social Effects	Yes	Application Review	The LAA for the Labour Market and Regional Economic Development VCs in the dAIR will be amended to include Electoral D of the Squamish Lillooet Regional District. This will result in the inclusion of certain unincorporated communities, such as Furry Creek, in the LAA.	
60	2-Jun-14	Kimberly Needham, Director of Planning and Development Services	Squamish-Lillooet Regional District	dAIR	Pg. 105	LAA and RAA should include operational implications for SURD emergency services should there be an incident impacting the Howe Sound (during operation, especially throughout the shipping corridor).	Social Effects (Emergency Services)	Yes	Application Review	Section 7.2.3 of the dAIR has been updated to include the following text: The assessment of the potential effects of the Project on the Emergency Services sub-component will take into account the service areas of local and regional emergency service providers.	

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61	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	7.2.1 - P104	Emergency Services - Squamish Fire Rescue is a combination fire Department that relies heavily on its Volunteer force. The current operating model has the Department operating with 5 Career fire fighters and two Chief Officers Monday through Friday from 06:30 – 19:30 hrs. During these operating hours times the volunteer group (45 members) is largely unavailable to respond due to work and personal commitments. The rest of the operating hours are covered by volunteers who respond from home to the fire hall and then to the incident once they have assembled a fire crew consisting of a minimum of 4 trained members. Squamish Fire Rescue's response capabilities are limited to structural firefighting, wild land initial response firefighting, first responder medical aid assistance and highway rescue. The Department has very limited Technical Rescue response capabilities and will only respond to Hazardous Material incidents at the awareness level. The location of the Woodfibre LNG site is problematic in responding equipment and personnel. Historically Squamish Fire Rescue has only provided consulting services and inspection services to the former mill operator. Fire suppression systems should be of the highest standard and exceed the minimum standard given the location. I would suggest that an agreement for services be developed between Woodfibre LNG and the District of Squamish outlining service levels and funding for services if required starting at the construction or site occupancy stage. Will the proponent be establishing an Industrial Fire Brigade on site?	Infrastructure and Community Services		Permitting Requirement Local government	Thank you for the information on Squamish Fire Rescue. WNLG will ensure Project-specific emergency services during construction and operation, and additional information regarding facilities and training will be included in the EAC application, the CEMP and emergency response plans. The supporting infrastructure for emergency services, including equipment and water requirements, will be addressed prior to the start of construction. The Project will be self-sufficient in terms of emergency response during operations. WNLG has met with the Squamish Fire Rescue to discuss their concerns, and will continue ongoing dialogue as required.	
62	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	7.2.3-P 106	What is the on-site emergency services that Woodfibre LNG looking for. Please be specific?	Infrastructure and Community Services		Permitting Requirement Local government	The Project will be self-sufficient in terms of emergency response during operations. WNLG has met with the Squamish Fire Rescue to discuss their concerns, and will continue ongoing dialogue as required.	
63	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue		7.2.3 - P107 Table 7-1	Squamish Fire Rescue currently does not offer any Marine based emergency services including ship board firefighting services.	Infrastructure and Community Services		Permitting Requirement Local government	WNLG acknowledges this information provided by the Squamish Fire Rescue. The Project will be self-sufficient in terms of emergency response during operations. WNLG has met with the Squamish Fire Rescue to discuss their concerns, and will continue ongoing dialogue as required.	
64	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	VC	7.2 Infrastructure and Community Services P.104	The increase in infrastructure use will create changes in capacity utilization and staffing costs while decreasing the overall availability of access. An analysis of mitigation methods to lessen the impact on infrastructure should be undertaken.	Infrastructure and Community Services		Application Review	WNLG confirms that there will be an assessment of potential Project effects on the Infrastructure and Community Services VC. If Project-associated effects are identified in these areas, then the Project mitigation measures will be included in the EA application. Section 7.2.3 has been amended as follows: If negative residual effects are identified in for the Regional and Community Infrastructure and Services VC, a description of proposed mitigation measures to reduce such negative impacts will be included in the Application.	
65	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada (TC)	VC	VC Page 17 and 26, dAIR: 133 Table 7-2	TC is in agreement that Marine Transportation should be included as a Value Component. TC recommends the following "Potential Adverse Project Effects" in order to capture all Interferences resulting from the project on marine navigation: 1. Interference with marine navigation. 2. Interference with marine fisheries. 3. Interference with marine recreation and tourism. 4. Interference with marine aboriginal use. TC recommends the following "Indicators" or "Measurable Parameters" relating to the above Project Effects: 1. Proportion of navigable channel affected by construction and operation of marine terminal, including safety zones. 2. Number and types of marine vessels as a result of the proposed project; Location of fisheries including access routes; Attribute data on marine uses along shipping channel (i.e. gear used in fisheries, volume of landings of target species). 3. Marine recreational and tourism activities/destinations/access routes overlapping with proposed Project and marine access route; Indicators of visitor frequency. 4. Marine aboriginal use activities/destinations/access routes overlapping with proposed Project and marine access route.	Marine Transport	yes	Application Review	The Marine Transport VC assessment of potential effects in the EAC Application will cover the items requested including: 1. Interference with marine navigation. 2. Interference with marine fisheries (limited to DFO day catch data) 3. Interference with marine recreation and tourism (tourism also covered in the LRU Chapter) 4. Aboriginal marine use will be addressed in Part C Aboriginal Groups Information and Requirements. The parameters listed will also be used in the effects assessment with noted exceptions: 1. Included as an indicator. 2. Included as an indicator. However, DFO boat day data will be used instead of volume of landings of target species as this is more applicable to marine transportation. Data on fisheries access routes will be limited to indicating general areas used. 3. Included as an indicator (tourism will also be addressed in the LRU VC). Data on visitor frequency is limited. 4. Marine aboriginal use including activities/destinations/access routes overlapping with proposed Project and marine access route use will be addressed in Part C Aboriginal Groups Information and Requirements.	TC - okay

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66	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	133	There are three main components to navigation under the NPA review: Commercial (including fishing), Recreational, and Aboriginal for traditional purposes. Commercial and Recreational navigation appear to be addressed in table 7-2 respectively. However, there is no clear heading for Aboriginal uses for navigation. This information is required in order to meet the requirements of the NPA and to ensure that TC's Duty to Consult, with respect to navigation, has been met. TC has provided their preferences for Table 7-2 in the comment above however if these are not heeded, TC would recommend the proponent specify whether any traditional or current Aboriginal uses of the water body for navigation are identified or not and if so, to describe them.	Marine Transport	Yes	Application Review	The following text has been added to Section 17.6 of the dAIR. The baseline conditions of VCs assessed in Part 8 and associated with the exercise of Aboriginal interests, including an assessment of marine Aboriginal use, activities, destinations and access routes overlapping with the Project and marine access routes.	TC - okay
67	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	7.3.2	For the last paragraph of this section where baseline or existing conditions are discussed, TC offers the following recommendations in terms of information to be collected and used to determine project effects: <ul style="list-style-type: none"> • Identification of volumes, types and capacity of marine traffic in the area and impacts on such (in Potential Impacts Section). • Bathymetric surveys of the marine area, navigational channels and any sediment disposal sites. • Anchorage areas to be used. • Capital and maintenance dredging work, specifying the nature and volume of sediment, dredging methods (type of dredge, duration, frequency, etc.), surface area of the areas to be dredged, sediment management (land and aquatic) provisions, and sediment disposal area (if necessary), and navigation activities in Canadian waters (number and frequency of trips). • Ballast water management • Describe how and for how long information was collected and from what sources in relation to current and traditional navigation uses. • Describe any recreational uses of natural waters (i.e., swimming, canoeing, fishing). • Describe existing commercial navigational usages including movement patterns of fishing vessels. <ul style="list-style-type: none"> • Provide information on current, historic and/or potential usage of all waterways and water bodies that will be directly affected by the project, including current Aboriginal uses, where available. • Proponent to provide information including type, size and frequency on all types of navigation using areas in the vicinity of marine routes. • Identify and describe mitigation for vessel traffic likely impacted by the construction and operation of the physical works associated with this project. 	Marine Transport	No. This information doesn't need to go into the dAIR, just for the proponent to make note of during baseline information collection.	Application Review	Acknowledged. The following items will be included in the marine transport chapter: <ul style="list-style-type: none"> - Identify volumes, types of marine traffic in the area and impacts on such - Describe how and for how long information was collected and from what sources in relation to current and traditional navigation uses. - Describe any recreational uses of natural waters (i.e., swimming, canoeing, fishing). - Describe existing commercial navigational usages including movement patterns of fishing vessels (movement patterns will be limited to general indication of use areas) - Provide information on current, historic and/or potential usage of all waterways and water bodies that will be directly affected by the project, including current Aboriginal uses, where available (historic uses will be limited to data for the last 3 to 5 years. Aboriginal marine use will be addressed in Part C Aboriginal Groups Information and Requirements). - Provide information including type, size and frequency on all types of navigation using areas in the vicinity of marine routes. Identify and describe mitigation for vessel traffic likely impacted by the construction and operation of the Project works. Limited to general mitigation. Navigational risk mitigation will be addressed in the Navigational Risk Assessment. The following items fall outside of the scope of the Marine Transportation Chapter but may be included in the Navigational Risk Assessment (TERMPOL) <ul style="list-style-type: none"> - Information on the capacity of navigational channels - Bathymetric survey data - Anchorage areas to be used - Ballast water management - Movement patterns to fishing vessels will be limited - Navigational risk mitigation 	TC - okay
68	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	2.130	The dAIR references "Control Zones". a. Please specify under which Act or Regulation the Proponent intends to make application for this proposed zone, in the Marine Transportation Section of the dAIR. b. Please specify how the proponent intends to manage this zone (barriers, buoys, etc.). What will the construction /operation zone look like? (how far along the foreshore / seaward will it go). c. This information is required to ensure that there is no contravention of the Navigation Protection Act by unlawfully restricting the public right to navigation.	Marine Transport	No	Application Review and OGC Permitting	Additional information regarding the control zone will be included in Section 2.2.7 (Project Activities) of the Application. (a) The control zone will be established and maintained around the facility as required by the LNG Facility Regulation. (b) The requirements for managing the control zone are currently being evaluated and additional information will be provided in the Application. At this time, WNLG foresees using a combination of markers and patrol vessels. The following statements have been added to Section 2.2.7.2 of the dAIR (changes in red): <ul style="list-style-type: none"> • Establishment of a control zone around the facility to manage activity adjacent to the Project components as required by OGC permitting. • Patrolling of control zones around LNG facility and FSO. The Application will include a description of the control zone, and methods of control zone management. (c) Following issuance of the EA certificate, WNLG will apply for a permit under the Navigation Protection Act.	TC - okay

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69	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	130, Section 7.3.1	In the first bullet the following text in red should be added to better capture the interferences to navigation "Navigable waters.... along the shipping route and within the project area". The last part should be added to reflect the marine traffic within the project activity zone. Another bullet should be added to this first group of bullets recognizing aboriginal marine use.	Marine Transport	Yes	Application Review	Text in the revised Section 7.3 has been edited to include a reference to the Project area as well as to the marine corridor (note the marine component of Project area is part of the marine corridor). Section 7.3.1.1 Spatial boundaries has been edited as follows (edit in red): LAAs: The marine portion of the Project area plus a 500m wide area inclusive of the marine infrastructure and control zones. Aboriginal marine use will be addressed in Section 17 of the EAC Application.	TC - okay
70	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	130, Section 7.3.1	TC recommends adding the following red text to this 3rd paragraph to capture aboriginal impacts: "There may be an interaction between... Commercial, recreational, aboriginal, fisheries ..."	Marine Transport	Yes	Application Review	The following text has been added to Section 17.0 of the dAIR (in red): + The baseline conditions of VCs assessed in Part 8 and associated with the exercise of Aboriginal Interests, including an assessment of marine Aboriginal use, activities, destinations and access routes overlapping with the Project and marine access routes.	TC - okay
71	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	130	The Project may result in both direct and indirect effects on marine navigation however the dAIR has only included direct effects. Indirect effects on navigation (as a result of a change to the environment through project activities) are not included and should be.	Marine Transport	Yes	Application Review	The following text has been added to Section 7.3.3 of the dAIR. The Application will describe the specific approach and methods used to determine direct and indirect Project-related effects on marine transportation, including criteria for characterizing potential Project-related effects.	TC - okay
72	30-May-14	Paula Doucette, Senior	Transport Canada	dAIR	130	The application should expand upon the rationale for the spatial boundaries and a statement stating such should be included in the dAIR.	Marine Transport	Yes	Application Review	Acknowledged. As stated in Section 4.3 Environmental Assessment Methods, the Application will describe the rationale for establishing spatial boundaries.	TC - okay
73	30-May-14	Paula Doucette, Senior	Transport Canada	dAIR	132, Section 7.3.3	Check duplication of sentences in 1st, 2nd and 3rd paragraphs.	Marine Transport	Yes	N/A	WLNG appreciates the edit. Section 7.3.3 - The 3rd paragraph has been deleted to remove duplication.	TC - okay
74	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	Marine Transportation Section	TC recommends that the following statement regarding TERMPOL should be added to the dAIR/Application, if appropriate from the proponent's perspective. "A Tempol review is a technical analysis designed to assess the risks to navigation and public safety associated with shipping and navigation. The report issued by the Tempol Review Committee at the end of the review examines the marine transportation operations in the context of the existing marine regulatory regime. The appraisal gives federal government departments, agencies and the proponent an opportunity to address new or changing issues, concerns, or priorities related to the project's marine transportation components. Although the CLAA/BC EAO do not require the Environmental Impact Statement/Application to include a discussion about TERMPOL, there are aspects of the discussions and studies carried out for the purposes of the voluntary TERMPOL process that may overlap with those topics that would also likely occur for the purposes of the environmental assessment such as these aspects pertaining to Accidents and Malfunctions, and Effects of the Environment on the Project. Any other matters that are covered as part of the TERMPOL process will not be required for the EA. As it is efficient and practical to do so the two processes may inform each other.	Marine Transport	Yes	WLNG appreciates the statement that TC has written on the TERMPOL process. The text for marine transport p. 116 has been edited as shown in red. "The Application will include a description of legislation, guidelines, BMPs, and guidance documents that are relevant to the management of the Marine Transport VC and reference the participation in TERMPOL where applicable".	TC - okay	
75	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		d) Marine Transport Valued Components: The marine transport component notes the marine transport route. These are shared by vessels (commercial and recreational) that access the SCRD, Gambler Island Local Trust and Town of Gibsons. Thus the draft AIR should specifically refer to considering, gathering information about and identifying potential impacts on these areas. As with the Sustainable Economy VC, reference is made to Howe Sound area and this section could specifically reference the SCRD, Gambler Island Local Trust and Town of Gibsons areas.	Marine Transport			WLNG acknowledges this comment, however, the definition of spatial boundaries for the assessment will not be amended. As noted in Section 4.3.1 (Environmental Assessment Methods - Spatial Boundaries): The Application will describe the spatial boundaries that encompass the geographic extent of measurable, potential environmental, economic, social, heritage and health effects of the Project. Boundaries have been chosen to encompass cause-and-effect relationships.	
76	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		e) Full range of potential impact of water from Liquid Natural Gas (LNG) tankers on shoreline should be investigated in addition to potential heritage/archaeology impacts.	Marine Transport			LNG carriers from the Project will transit in accordance with the Canada Shipping Act (2001) and by-laws established by Transport Canada and the PPA. Similar to other large vessels, the LNG carriers will be required to comply with speed limits.	

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77	22-May-14	Malissa Smith, Land Officer	FLNR	dAIR	General Comment	As per Land Policy – a Security is required and is held by the Crown at an amount that is commensurate with the level of risk of the activity to the Crown. A four-step Risk Assessment Procedure is available to determine this cost (see Appendix A of Tenure Administration Land Procedure – available online). Part of this procedure requires understanding the presence of hazardous materials and contaminants. As follows, prior to transfer of the water lot Lease and prior to issuance of any other new Tenure agreement, the client(s) must conduct a Contaminated Sites Assessment so that the existing hazards and contaminants associated with the water lots are clearly understood by the Crown and by the applicant, Woodfibre LNG.	Land and Resource Use	No	yes (Application Review and OGC Permitting)	The current owner of the land (Western Forest Products) has committed to obtaining a Certificate of Compliance (COC) prior to sale of the land to WLNG. The conditions and monitoring requirements of the COC will be assumed by WLNG.	
78	22-May-14	Malissa Smith, Land Officer	FLNR	dAIR	General Comment	The Lands Section is only reviewing Crown Land Authorization requirements on unencumbered Crown Land associated with the proposed water lots. If unencumbered Crown Land is part of the upland portion of the Woodfibre LNG application – please resubmit a request for review to the Lands Section that specifies these upland locations.	Land and Resource Use	no	No	A small portion of upland Crown land is now anticipated to be required for the Project. The updated Project area in the revised dAIR reflects this requirement. WLNG will apply for Crown land tenure as part of the OGC permitting process.	
79	22-May-14	Malissa Smith, Land Officer	FLNR	VC	Land and Resource Use	The proposed water lot overlaps with the following Crown Land Tenures: - File #0044927 – Industrial Lease – held by WESTERN FOREST PRODUCTS INC – for the purpose of general log handling (log dumping, storage, sorting and related improvements), wharf, barge and boat moorage, facilities incidental to the dismantling and clean-up of a pulp mill and boat works for the dismantling and conversion of a BC Ferry to a barge. - File #2410826 – Waterpower – Investigative Licence – held by 0950568 BC LTD (License area extends into water/rent area) Western Forest Products is to assign the Lease (0044927) to Woodfibre LNG, as they are now the upland owners. Woodfibre LNG will be required to change the purpose statement in the existing WFP Lease to clarify the new purpose and use of the Land (i.e., purpose as proposed by Woodfibre LNG). Specifically to be excluded from the updated purpose statement is the purpose of "boat works and dismantling and conversion of a BC Ferry to a barge." The existing waterpower tenure holder must be consulted with to determine if the Woodfibre LNG application is an appropriate / compatible use in the water lot area.	Land and Resource Use	no	Permitting Requirement OGC	WLNG acknowledges that there is an existing Investigative Licence. As part of the Oil and Gas Commission (OGC) permitting process, WLNG will work with the OGC to ensure that the Project is compatible with all existing Crown Land tenures.	
80	22-May-14	Malissa Smith, Land Officer	FLNR	VC	Land and Resource Use	The proposal overlaps with a Section 15 Land Act Order in Council Reserve. This map reserve is held for the specific purpose of a public Ferry Terminal. No Land Act activity is permitted to overlap a Section 15 Reserve. Therefore, Woodfibre LNG and the OGC have two potential options to move forward: 1. Exclude the Section 15 Reserve area from Tenure Application area 2. Cancel the existing Section 15 Reserve – a process which can only take place by either: a. Amending the Section 15 Reserve – Cabinet/ Lieutenant Governor in Council decision b. Apply for a new Order in Council that requests to cancel the existing Section 15 Reserve – application goes to Cabinet/ Lieutenant Governor in Council decision Note: only federal and provincial agencies / ministries can initiate a Reserve and / or the cancellation thereof.	Land and Resource Use	Maybe	Permitting Requirement	WLNG acknowledges this comment, and is currently examining the best approach to pursue option 2.	
81	22-May-14	Malissa Smith, Land Officer	FLNR	VC	Land and Resource Use	The proposed projects are located along the foreshore and may front private upland property. Based on initial review, the upland owner is the Applicant. As such there are no anticipated conflicts that would infringe on the upland owners riparian rights. If however, the upland owner is not the applicant – consent must be granted by the appropriate upland owner in order to tenure the foreshore.	Land and Resource Use	no	No	FLNR is correct that the upland owner will be WLNG.	

Woodfibre LNG Project – Draft VC Selection/ Draft AIR Working Group Comment Tracking Table

Date: May 27, 2014
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Revisoft

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82	26-May-14	Yeto Headmaster, Regional Environmental Assessment Coordinator	Health Canada	DAIR	Section 7.4.2 (pp. 133-144)	HC suggests that the "Land and Resource Use" VC also cross-reference baseline information from available Traditional Land Use Studies to incorporate Aboriginal uses of the Project area, where appropriate to do so.	Land and Resource Use	yes	Application Review	WLNG confirms that any available Traditional Land Use studies will be cross-referenced as appropriate, as indicated in Section 7.4.1. The Application will include a description of legislation, guidelines, BMPs, and guidance documents that are relevant to the management of the Land and Resource Use VC. If available, the Application will also describe how TK (traditional knowledge) and TU (traditional use) information, as obtained through consultation with Aboriginal groups and other sources were used in the assessment.	
83	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	DAIR	Page 41, Table 4-5	Forestry Activities – note that the proposed development area is within the Lower Squamish Landscape Unit, not the Howe Landscape Unit.	Land and Resource Use	yes		WLNG acknowledges this change and has amended Table 4-5 as follows (changes in red): The Lower Squamish Landscape Unit (Sea-to-Sky Land and Resource Management Plan) contains several forms of forest tenures including: woodlots and forest and timber licences.	
84	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	DAIR	Page 114, S 7.4.3	Consider the potential mitigation for outdoor recreation impacted activities, may include: a) allowances for public access to the ferry for recreational purposes, and b) providing a safe planned route through the development to accommodate through traffic to access recreation opportunities.	Land and Resource Use	yes		WLNG confirms that these mitigation measures will be considered, subject to the safety requirements.	
85	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	DAIR	Table 7-3	Potential adverse effects on linear infrastructure may be indicated by the levels of forest harvesting. In addition to how those harvesting levels are scheduled during LNG construction, Coordinating these activities may best be addressed by a road use agreement for the road permit between all road users.	Land and Resource Use	yes	Permitting Requirement	WLNG acknowledges this comment. The Land and Resource Use VC includes a forestry sub-component.	
86	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	VC	Appendix A	Suggest that Forest Health be added as a valued component (Environment)	Land and Resource Use			WLNG appreciates the suggestion; however, 'forest health' will not be included as a VC. Part of the process of selecting VCs was to minimize redundancy and duplication. Although forest health was not included in the candidate list of VCs, native vegetation is considered as part of the Vegetation Communities VC. We believe that this is appropriate given the minimal amount of clearing associated with the Project.	
87	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	VC	Appendix A	Suggest that Wildfire be added as a valued component (Environment)	Land and Resource Use			WLNG appreciates the suggestion, however 'wildfire' will not be included as a valued component. Wildfire will be considered in Section 12 (Effects of the Environment on the Project).	
88	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada (TC)	DAIR	General	TC notes that there is no mention of any impacts associated with the proposed flare stack on air navigation. Howe Sound may have VFR floatplane and helicopter traffic. The flare stack must be assessed for marking and lighting under the Canadian Aviation Regulations (CAR) 601. The information on the location, height and characteristics of the obstacle as well as the lighting and marking will probably have to be published in the Aeronautical Information Publications as appropriate. Impacts to air navigation should be captured in the DAIR. In addition the height may have some impact on NavCanada's procedures. They should be contacted and provided information on the location, height and characteristics of the obstacle. They can be contacted and the information provided through the process described on their website at: http://www.navcanada.ca/en/products-and-services/Pages/land-use-program.aspx .	Land and Resource Use	yes	Application Review Permitting Requirement	Section 7.2.3 Infrastructure and Community Services has been amended as follows (changes in red): The Application will describe the specific approach and methods used to determine the potential Project-related effects on infrastructure and community services, including consideration of potential effects of the flare stack on air navigation. Interactions with a potential to result in effects of concern will be carried forward in this analysis. WLNG commits to following the appropriate permitting procedures. Through NavCanada we will register any new structures using the Land Use Submission Form to mitigate possible effects to air traffic. The Proponent will also be registering in the Accountable Source System (ACS) for Transport Canada.	TC – okay
89	2-Jun-14	Russell Inoué, Fire Chief	Squamish Fire Rescue	VC	7.4.3 Potential interactions of the project and proposed mitigation	The form and structure of the buildings and floating structures including the surrounding support structures will impact the tourism and outdoor recreation viewscape. These issues should be addressed including potential mitigation factors.	Visual Quality			Section 7.5 – Visual Quality will address potential Project interactions with the Visual Quality VC and proposed mitigation. The objective of the visual assessment is to identify and determine potential Project-related visual effects and aesthetics in comparison to the existing visual baseline conditions. The assessment will identify and evaluate potential adverse effects of all phases of the Project on the Visual Quality VC.	

Comment ID#	Date Submitted	Submitter Name and Title	Agency/ Affiliation	Comment relevant to draft VC selection or dAIR?	Relevant section and page number	Comment/ Issue Description/ Suggested Changes	Category/ Theme	Change to the draft VC selection/ dAIR required?	Application Review and/or Permitting Requirements?	Proponent's Response	BAIR Round 2 - Due August 1, 2014
90	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	dAIR	5.7.5, p117.	Visual Quality is also an intermediate component of the 'Land and Resource Use' VC, based on the requirement for forestry operations (cut blocks and roads) to manage for scenic Objectives established by the Government Actions Regulation (GAR). The Sea to Sky Natural Resource District is currently initiating a project to review and update the scenic area and visual quality objectives for the corridor. This process will also update viewpoints, and include viewpoint(s) in the Sea to Sky Gondola location. Correction: Objectives and strategies for managing visual quality are not located in resource management plans or landscape unit plans. Forestry tenure holders must include objectives in Forest Stewardship Plans.	Visual Quality	yes		Our understanding is that addressing visual quality objectives is a legal requirement for Forestry Stewardship Plans, but does not pertain to other resource use. Visual quality objectives are often included in regional plans, and will be considered in our assessment. The second paragraph of Section 7.5.1 has been amended as follows (changes in red): The Application will include a description of legislation, guidelines, BMPs, and guidance documents that are relevant to the management of the Visual Quality VC, including a reference to the Sea to Sky Natural Resource District's draft visual quality objectives where applicable.	
91	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	dAIR	5.7.5.2 p118	Existing conditions. Correction: For FLNR the official district office name has changed to 'Sea to Sky Natural Resource District' - not Squamish District, could be confused with the municipality/District of Squamish (DCS).	Visual Quality	yes		WLNK has noted the change to the district office name (changes in red): Section 7.5.2 - Bullet 1 • Desktop review of existing information including available local plans, policy documents, aerial photographs, maps and topographical surveys. The visual resources for the Project area have been established and made available through the current approved British Columbia Visual Landscape Inventory spatial and tabular data (MOF 1997), with ongoing amendments through the Sea to Sky Natural Resource District and MFLNRDC.	
92	26-May-14	Yota Hatziantoniou, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC: Table 1 (pg. 15), Appendix A (pg. 3) & dAIR: Table 4-1 (pg. 29)	HC prefers that the "Public Health" VC be retitled "Human Health" VC, so that it is inclusive of both public and Aboriginal health considerations.	Public Health	yes	Application Review	Woodfibre does not intend to exclude aboriginal health by using 'Public Health' as the VC name. Aboriginal health factors will be included. The term Public Health is used because the EA will include a type of Human Health Risk Assessment (HHRA). The HHRA will include some socio-economic indicators in addition to the risk calculations. The public health assessment will include a human health risk assessment and information about key social determinants of health to provide an assessment of community health and well being. The public health assessment will be inclusive of aboriginal health.	
93	2-Jun-14	Keith Leachman, on behalf of MoE and MWH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	VC	Appendix A, pg. 1	Comparison of predicted ambient air concentrations to the MOE recommended guidelines, including the health-based guidelines from the WHO and the US EPA. A Human Health Risk Assessment where predicted emissions will be compared with these guidelines is necessary. If the predicted concentrations are higher than published thresholds, or have a concentration ratio >1, then the risk to human health (quantitative risk assessment) must be assessed through dose-response curves or equivalent. It will be important to understand the predicted combined effects of SO2 and NO2 on human health. Important elements: • which CACs will be assessed • exposure time interval to be assessed (1 hr avg/10 min avg/annual avg) • comparisons of ambient air concentrations to guidelines beyond provincial and federal to include WHO and the US EPA • quantitative risk assessment if guidelines are exceeded (using dose-response relationships) if	Public Health	yes	Application Review	The following text was added to Section 9.2.1 of the dAIR. A Human Health Risk Assessment based on predicted emissions will be conducted if predicted concentrations exceed air quality guidelines and this will be determined in the problem formulation stage of the risk assessment. Air quality guidelines used for screening purposes will be based on health endpoints and obtained from a variety of regulatory sources including: BC MoE, Agency for Toxic Substances and Disease Registry, CCME, Ontario Ministry of the Environment, World Health Organization, Texas Commission on Environmental Quality and the United States Environmental Protection Agency. Cumulative effects of substances acting on the same toxicological endpoints will also be included based on the results of the problem formulation. Contaminants identified in the air quality emissions inventory (likely CACs and VOCs) will be assessed. Exposure periods are typically 1-hr, 24-h and annual but some of the shorter exposure durations vary slightly by chemical so they will be matched by air quality standard (e.g., 10 minutes, eight hour).	

Comment ID	Date Submitted	Submitter Name and Title	Agency/ Affiliation	Comment relevant to draft VC selection or dAIR?	Relevant section and page number	Comments/ Issues/ Concerns/ Suggestions/ Comments	Category/ Theme	Change to the draft VC selection/ draft AIR required?	Application Review and/or Permitting Requirement?	Proponent's Response	AIR Round 2 - Due April 2014
84	27-May-14	James Lu and Paul Martineau, Ministry Health Officers	Vancouver Coastal Health (VCH)	VC dAIR	VC-page 15 dAIR-page 29	<p>The Valued Component identified under the Health Pillar is concerned only with assessing effects to human health from the changes in the physical environment that might occur from this project (e.g. air, water, ambient light and noise). Human health is also determined by other factors such as employment, housing, recreational opportunities, and social networks/sense of community belonging. Most of the missing health determinants are listed under one or more of the other Pillars as valued components. However to fully assess the Health Pillar, there needs to be explicit cross linkages to the Health Pillar. There is no need to duplicate the work but the fact that these other VCs feed into the Health Pillar has to be articulated in a transparent way.</p> <p>Recommendation: Have two valued components (VCs) under the Health Pillar with these subcomponents: 1. Population Health • subVC: Population Health Status and Demographics - Population health status indicators are not listed in the dAIR or the dVC as information the proponent plans to gather and analyze. Background data on population health for the community is required before one can even begin assessing the possible impacts of the project to the community.</p> <p>2. Population Health • subVC: Labour Market and Sustainable Economy – Cross link to the VCs in the Economic Pillar. Please add indicator(s) to capture the proportion of the projected workforce during construction and operation phases that will be hired from the Local Study Area residents, as well as projected immigration into the Local Study Area.</p> <p>3. subVC: Infrastructure and Community Services, Land and Resource Use – Cross link to the VCs in the Social Pillar. This would capture issues that could affect population health; such as impacts to housing cost and availability, demand for community and educational services, demands for emergency services. In addition impacts to recreational use within the Howe Sound shorelines and waters (Appropriate benchmarks includes the Health Canada Guidelines for Recreational Water Quality including secondary exposures such as from fish and shellfish harvesting and consumption. Also of relevance is the Howe Sound Water Quality Guidelines (from MoE). Given the existing level of waste discharges into Howe Sound from industrial, commercial and residential activities, a cumulative impacts analysis should be considered. An inventory of existing human activities in the Howe Sound area should be included in the dAIR. For example, to adequately assess the potential impacts to recreational activities, all bathing beaches, recreation and seasonal camps will need to be identified. The location of summer camps should be indicated on figure 4-26 (PHAA).</p> <p>4. subVC: Visual Quality – Changes in scenic values has an effect on quality of life. The WHO European Charter on Environment and Health, 1988, states that "good health and well being require a clean and harmonious environment in which aesthetic factors are given their due importance."</p> <p>5. subVC: Marine Transportation – Proponent needs to assess impact on marine traffic related accidents (collision, grounding) leading to injuries. Assessments should not be limited to the shipping route and Darryl Bay Ferry but also consider accident and injury impacts within the entire recreational and commercial water activity areas. The outdoor recreation regional assessment area figure 4-23 should be expanded to include Nexen Beach, Clattermole slough and Squamish Marina, the area around the Kito Surf Spit (and perhaps other marina's such as HS Bay).</p>	Public Health	yes	<p>Community health and wellbeing has been added as a sub-component to Section 9.2 Public Health.</p> <p>Section 9.2.1 (last paragraph), has been amended as follows (changes in red): Where appropriate, this section will present a summary of information from ICs and VCs with the potential to affect public health and discuss the linkage between the IC or VC and public health. The VCs and ICs with the potential to affect public health include: • Section 5.2 Atmospheric Environment • Section 5.4 Atmospheric Sound • Section 5.7 Contamination • Section 7.2 Infrastructure and Community Services • Section 7.5 Visual Quality</p>		

Comment ID	Date Submitted	Submitter Name and Title	Agency/Ministry Health Officers	Comment relevant to Draft VC selection or AIR	Relevant section and page number	Comments/ Issue Description/ Suggested Changes	Category/Theme	Change to the draft VC selection/DAIR required?	Application Review and/or Permitting Requirement?	Proposed Response	DAIR Round 2 – Due Aug 11 2014
85	27-May-14	James Lu and Paul Martineau, Ministry Health Officers	Vancouver Coastal Health	VC DAIR	VC-page 15 dAIR-pg 29	<p>2. Public Health</p> <p>• Add a subVC: Water Systems – Proponent needs to include an assessment of existing potable and non-potable water systems as defined by the <i>Drinking Water Protection Act</i> for compliance with the Act and in comparison with the water quality standards established by the <i>Guidelines for Canadian Drinking Water Quality</i> and any other relevant legislation or Best Management Practice Guidelines. New proposed water supply systems or upgrades to existing ones require a Construction Permit in advance from the Health Authority. Water system assessments must consider contaminated site studies and activities and include protective measures for all proposed potable water sources (surface, ground or marine) [Comment applies to water systems, located in temporal boundaries].</p> <p>• Written confirmation that there are no domestic water licenses/private water systems located within the Woodfibre and Mill Creek watersheds.</p> <p>• Add a subVC: Liquid Waste Management – A “filling” will be required for any alterations or new construction of onsite sewerage disposal systems that are subject to the BC Sewerage System Regulation. Also, written confirmation that all other proposed and existing liquid waste water systems including industrial, domestic, and storm and runoff water systems and ocean outfalls comply with the BC Waste Water Regulations permitting requirements, and any other relevant legislation and area guidelines, i.e. the Howe Sound Water Quality Guidelines (MOC).</p> <p>It is unknown how the proponent plans to manage waste discharge from vessels. Ideally shore sewerage services would be provided to vessels while in dock. If vessel waste discharge into Howe Sound is to be part of the standard operating procedure, the potential effect of the waste discharge on nearby summer camps and recreational waters must be addressed.</p>	Public Health	Yes	Permitting Requirement	See response to comment 84	
				VC	Table 1, pg 10	<p>• Add a subVC: Air Quality – Air criteria as shown under Table 1 should also include H₂S and ozone (this omission was noted by the Health Canada reps on the working group). VC should refer to the Howe Sound Air Shed Management Plan goals and objectives in addition to provincial and federal regulations and BMP guidelines. The choice to use existing hydro power as the primary supply versus natural gas and the potential for the provision of shore power to marine vessels supports the air protection goals of the Air Shed Management Plan.</p> <p>It is not clear from the indicators and rationale for the draft Public Health VC whether the potential air quality effects on human health will be adequately assessed. It is not sufficient to simply compare the air dispersal model outputs to existing AQ objectives. The model outputs needs to be inputs into available exposure-response functions and health effects calculated in terms of mortality and morbidity (e.g. for Criteria Air Contaminants, VOC, H₂S CO, Ozone, and PM).</p>					
96	27-May-14	James Lu and Paul Martineau, Ministry Health Officers	Vancouver Coastal Health	VC	Map 4-20	<p>3. Emergency Response</p> <p>• Emergency services, mitigation and response plans must be established in conjunction with local, regional, provincial and federal government services and emergency operations staff. The emergency services assessment area map 4-20 is limited to the project site and shipping routes only. This should be expanded to include the communities in Howe Sound, as well as the entire shipping route to and from the Pacific Ocean open water.</p> <p>• Request that an emergency management plan is developed and included in the AIR. This plan should include details regarding spills (both on land and water) of oil, gas, mercury and other hazardous material spills, emergency power loss and flare ups, facility fire or explosions, LNG emissions, transportation accidents, etc.</p> <p>• A Transport Canada TERMPOL (Technical Review Process of Marine Terminals and Transshipment Sites) review should be required for the project to assess the navigational risks associated with the proposal. Results of the review should be part of AIR.</p>	Emergency Response			<p>The Application Information Requirements (AIR) is a document that identifies the information that WNLG is required to provide in the EAC application. WNLG assumes that VCH is requesting the information to be included in the EAC application and not the AIR.</p> <p>WNLG agrees that emergency services response must be coordinated between all levels of government services. However, an assessment of the entire shipping route is outside of the scope of the EA. Established shipping routes are regulated under separate legislation. LNG carriers used for the Project will transit in accordance with the Canada Shipping Act (2001) and by-laws established by Transport Canada and the Pacific Portage Authority (PPA).</p> <p>The EA document will include a list of potential accidents and malfunctions (Section 13) as well as specific Environmental Management Plans (Section 13). Detailed emergency response plans are outside of the scope of the EA, and will be developed at the permitting stage of the Project. The Facility Permit, issued by the Oil and Gas Commission, requires a detailed Emergency Response Plan.</p> <p>A TERMPOL review will be conducted for the Project; however, the TERMPOL assessment will not be completed until after the Project has applied for the EA certificate.</p>	
97	2-Jun-14	Kimberly Needham, Director of Planning and Development Services	Squamish-Lillooet Regional District	dAIR		Should take into consideration psychological impacts within the LAA (20x20km) and RAA (50x40km). Should also include more than just those spending time at/on the site or recreational users nearby, but those permanent residents in the Howe Sound.	Public Health	Yes	Application Review	The Public Health VC has been amended to include a community health and well-being sub-component. This section will consider determinants and parameters of community health and wellbeing, including income, alcohol and drug abuse, crime, community connectedness, and stress.	

Comment ID#	Date Submitted	Submitter Name and Title	Agency/ Affiliation	Comment relevant to draft VC selection or dAIR?	Relevant section and paragraph number	Comment/ Issue Description/Requested Changes	Category/ Theme	Change to the draft VC selection/dAIR required?	Application Review and/or Permitting Requirement?	Proposed Response	2AIR Round 2 - Due April 11, 2014
98	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 59, Section 5.9	The proponent should be aware that some of the BC/Canadian ambient guidelines/objectives (SO2 and NO2) are not to be used in the determination of any health effects. The proponent should contact the LNG Air Quality Specialist (warren.mccormick@gov.bc.ca) as soon as possible to discuss the dispersion modelling plan. The modelling plan should include CACs (as listed in Table 5.8) as well as any CEPA NPRI substances that may be reportable during operations. The proponent should also quantify the loss of any working fluids during operation. The proponent should also quantify the mass emissions of CACs from all construction activities. The effects assessment during operation should also include upset and emergency situations. The associated shipping activities should include tanker and tug travel throughout the RAA and at berth. WM	Public Health, Atmospheric Environment (Air Quality)	Yes	Application Review	The MoE will be consulted as early as possible in the modelling process. This will include provision of a conceptual and detailed model plan for MoE consideration and review. This approach is consistent with the BC MoE Air Dispersion Modelling Guidelines (2008). The model plans will detail the air emissions that will be quantified and assessed based on Project specific engineering data. The effects assessment for the operational phase will include consideration of emergency scenarios. The effects assessment will include consideration of all Project phases and emissions from shipping activities associated with the Project. The air quality risk assessment conducted as part of the public health assessment will be based on the use of health based air quality thresholds and thresholds from local, Canadian and International jurisdictions will be compared and a rationale will be provided for selection of environmental screening criteria. Based on discussions to date with the MoE on the conceptual model plan, the potential interim BC SO2 and NO2 ambient air criteria will be considered in the effects assessment. However, we don't recommend any change to the AIR, since the potential new criteria under consideration have not been made available to the public yet.	
99	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 125, Section 9.0	The Human Health Risk Assessment should follow Health Canada Guidance Documents on HHRA. MoH	Public Health	Yes	Application Review	Please see response to Comment #93.	
100	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 125 Section 9.0	The Application should provide the complete HHRA report as a technical appendix, following a standard HHRA framework as per Health Canada guidance, i.e. Problem Formulation, Exposure Assessment, Toxicity Assessment, Risk Characterization. MoH	Public Health	No	Application Review	Section 9.2.1 has been amended as follows (changes in red): The Project has the potential to affect public health through interactions / or changes to air quality, ambient light, and noise. Public health is an ultimate receptor for these potential changes, and accordingly was selected as a VC. The Public Health VC will be evaluated through a human health risk assessment and an assessment of community health and well-being. The complete Human Health Risk Assessment (HHRA) report will be appended to the Application. The HHRA will follow the standard framework as per Health Canada guidance (i.e., Problem Formulation, Exposure Assessment, Toxicity Assessment, Risk Characterization). A rationale will be provided for those exposure pathways that are excluded from further assessment.	
101	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 126, Table 9-1	Where objectives or standards are not available or sufficiently protective of human health, the assessment should refer to other jurisdictions (e.g. USEPA, WHO). Note that the current BC AAQOs for SO2 and NO2 are not considered sufficiently protective of human health. MoH	Public Health	No	Application Review	Please see response to Comments #93.	Go
102	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 126, Section 9.2.3	The HHRA should consider the effect of chemical mixtures as per Health Canada HHRA guidance. Where applicable, risk estimates may be summed for chemicals with similar mode of action and/or same target organ or tissue. For example, risk estimates for NO2 and SO2 are commonly summed, along with other chemicals identified as "respiratory irritants." MoH	Public Health	No	Application Review	Please see response to Comment #93.	
103	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 125, Section 9.0	To support the scope of the HHRA and in accordance with Health Canada HHRA guidelines, the HHRA technical report should include a detailed conceptual model of all contaminants of potential concern, pathways of exposure, and receptors, including rationale for the inclusion or exclusion of operative and inoperative pathways. MoH	Public Health	No	Application Review	Please see response to Comment #100.	
104	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 126, Table 9-1	The dAIR suggests that chemicals of potential concern will be screened against environmental quality guidelines/standards/objectives in the HHRA. Please note that some of these limits may not adequately characterize human health risk, especially in cases where they are developed based on other factors such as technological constraints, etc. Consequently, the HHRA should include analysis of dose-response data to assess the potential for acute and chronic health risks at exposure below these levels, particularly for sensitive receptors. MoH	Public Health	Yes	Application Review	Please see response to Comment #93.	

Comment ID	Date Submitted	Submitter Name and Title	Agency Affiliation	Comment relevance to draft VC selection or dAIR	Relevant section and page number	Comment/ Issue Description or Suggested Changes	Category/Theme	Change to the draft VC selection/dAIR required?	Application Review and/or Permitting Requirements	Proponent's Response	dAIR Round 2 - Due Aug 13, 2014	
105	24-May-14	Russell Inauyo, Fire Chief	Squamish Fire Rescue	dAIR	p11.0 -P130	The document should identify individual events and the mitigation measures to be undertaken during construction and operating phases. To include but not be limited to: Structure fires Wild Land fires Marine Vessel fires Marine Vessel Incidents Loading dock/ gas transfer fires Hazardous incidents and spills Tower Crane Rescue Confined Space Rescue Floods and debris flows Earthquake and Structural collapse Medical emergencies Explosion Motor Vehicle Accidents Industrial Accidents and Entanglement Rescue Ground Search and Rescue Fresh and Salt Water Rescue	Accidents and Malfunctions		OGC Permitting Requirement	Please see response to Comment #1. WNLNG acknowledges this comment and agrees that specific potential accidents and malfunctions are important to identify along with mitigation measures. Section 11 of the dAIR identifies the preliminary list of potential accidents and malfunctions that will be considered. A preliminary list of environmental management plans is included in Section 13 of the dAIR. WNLNG will comply with all WorkSafe BC requirements.		
106	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada (TC)	dAIR	p137, Section 17.0	In the first three bullets TC recommends the addition of the descriptor 'proposed' to 'project'.	Aboriginal Interests	Yes	Application Review	The definition of 'Project' in Section 2.0 of the dAIR has been amended (changes in red): This section will present a description of Woodfibre LNG Ltd (Proponent) as well as a Project Description for the proposed Woodfibre LNG Project (Project). The new definition of the term 'Project' indicates that it is a proposed project. The use of the word 'proposed' has been amended accordingly where it appears in the dAIR.	TC - okay	
107	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada (TC)	dAIR	p140, Section 20	The way this section currently reads including the Table 20-1, does not clearly outline/capture key considerations (specific issues and concerns raised by Aboriginal groups, the measures proposed to mitigate those effects, the adequacy of the mitigation measures proposed, and the degree to which the issues are considered resolved or addressed by the proponent and/or other parties) and may not result in adequate records/logs. TC has the following suggested revisions for paragraph 2 (pg 140): - The application will include an Aboriginal Issues Tracking Table that summarizes the potential adverse effects of the proposed project on Aboriginal interests, the measures proposed to mitigate those effects, and the degree to which the issues are considered resolved or addressed by the proponent and/or other parties; and - An appendix that contains comments raised by Aboriginal groups in relation to the proposed project (Engagement Logs)	Aboriginal Interests	Yes	Application Review	WNLNG agrees that specific issues and concerns raised by Aboriginal groups are important to capture in a separate document. A separate Aboriginal groups Tracking Table (in the same format as this Working Group tracking table) is being maintained to track the issues raised and mitigation measures proposed, as well as any follow-up questions or further correspondence on the issue(s). As part of the EA process, a separate 'Aboriginal Groups Consultation Document' is being developed that will outline the consultation process with Aboriginal groups.	TC - okay	
108	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		f) Public Meetings During each public consultation period, a public meeting should be arranged in the Gibsons area;	Public Consultation			The formal EAO public meeting locations are determined by the EAO.		
109	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		g) Additional comments may be provided by the SCRD during the public consultation period for the draft AIR;	Public Consultation			WNLNG acknowledges this comment.		
110	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		AND THAT the Environmental Assessment Office be requested to provide additional communication regarding public information meetings that will be held in Gibsons and area.	Public Consultation			Communications regarding public consultation meetings are determined by the EAO.		
PROPOONENT-INITIATED CHANGES												

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Mayall, Jane EAO:EX

WILEY
2014-07-31

From: Smith, Alanya C EAO:EX
Sent: Thursday, July 31, 2014 1:50 PM
To: Lara Taylor (ltaylor@hemmera.com); 'Byng Giraud'; 'Amanda Zinter'
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: 30050-20/WLNG-05-06 FW: For Review: Draft #2 AIR for Woodfibre LNG

Hello,
Please see the further comments/ information request from Arch Branch.

Thank you,
Alanya

Alanya Smith | Project Assessment Manager | Environmental Assessment Office | Tel: (250) 387-2406 | BB: 21'S
21'S | Fax: (250) 387-2208

From: Thorogood, Paula FLNR:EX
Sent: Thursday, July 31, 2014 1:43 PM
To: Smith, Alanya C EAO:EX
Subject: RE: For Review: Draft #2 AIR for Woodfibre LNG

Thank you Alanya,

I will return to the office August 12th. With the project shapefile, I may be able to determine whether the Provincial records contain information regarding the village site.

In the off-chance we are able to obtain shapefiles and conduct a search of the provincial records, I will provide further comment:

From our discussion, it sounds as though the proposed facility has been previously (and thoroughly) disturbed. Given the age of the previous sawmill, it is unlikely that an AIA was conducted on the subject property. The Archaeology Branch would like to see a formalized document to provide a brief history of the land use of the area, including a discussion of sites that may have been present prior to the sawmill. The Archaeology Branch also recommends a Chance Find Procedure is created. Depending on the nature of the development, the potential for intertidal features (fish weirs, canoe skids) may still be present.

Thanks, and sorry for any confusion.

Paula Thorogood | Archaeologist/Heritage Resource Specialist
Archaeology Branch | Ministry of Forests, Lands and Natural Resource Operations
Phone: 250-953-3300

From: Smith, Alanya C EAO:EX
Sent: Thursday, July 31, 2014 11:35 AM

To: Thorogood, Paula FLNR:EX
Subject: RE: For Review: Draft #2 AIR for Woodfibre LNG

Thank you Paula. I have forwarded your comments to the Proponent. The Eagle Mountain project referenced below is another project (pipeline that would feed the facility).
I will request a shapefile from the Proponent.

Thanks again,
Alanya

From: Thorogood, Paula FLNR:EX
Sent: Wednesday, July 30, 2014 5:22 PM
To: Smith, Alanya C EAO:EX
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: RE: For Review: Draft #2 AIR for Woodfibre LNG

Hi Alanya,

s.22

Please find attached my initial comments (n=3) for the revised dAIR. Basically, until an Archaeological Impact Assessment is complete, we will not know whether archaeological sites are located within the proposed development, nor mitigate impacts to archaeological resources.

In regards to comment 1: I looked through our records and could only find a permit 2014-0188, to conduct an "Archaeological impact assessment of FortisBC Energy Inc.'s proposed Eagle Mountain - Woodfibre Gas Pipeline Corridor running from Eagle Mountain in Coquitlam to Woodfibre, southwest of Squamish" which I don't think is the right project.

Thanks,

Paula Thorogood | Archaeologist/Heritage Resource Specialist
Archaeology Branch | Ministry of Forests, Lands and Natural Resource Operations
Phone: 250-953-3300

Mayall, Jane EAO:EX

FILE COPY

From: Smith, Alanya C EAO:EX
Sent: Thursday, July 31, 2014 11:39 AM
To: Lara Taylor (ltaylor@hemmera.com); 'Byng Giraud'; 'Amanda Zinter'
Cc: Mayall, Jane EAO:EX
Subject: 30050-20/WLNG-05-06 Project Shapefiles

Hello,

Would it be possible to provide us with shapefiles of the proposed Project (facility site and marine route) and a kmz (Google Earth file) to make available to the working group? This has been requested by Arch Branch to assess whether existing arch sites are documented the area.

Thank you,
Alanya

Alanya Smith | Project Assessment Manager | Environmental Assessment Office | Tel: (250) 387-2406 | BB: 21'S
21'S | Fax: (250) 387-2208

Mayall, Jane EAO:EX

From: Smith, Alanya C EAO:EX
Sent: Wednesday, July 30, 2014 4:57 PM
To: Lara Taylor (ltaylor@hemmera.com); 'Byng Giraud'
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: 30050-20/WLNG-05-06 RE: Woodfibre VC Selection comments

To clarify, EC will potentially submit further comments next week on the d2 version.

-----Original Message-----

From: Smith, Alanya C EAO:EX
Sent: Wednesday, July 30, 2014 4:56 PM
To: Lara Taylor (ltaylor@hemmera.com); 'Byng Giraud'
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: FW: Woodfibre VC Selection comments

Comments on the dAIR from environment Canada.

Thank you,
 Alanya

-----Original Message-----

From: Leung, David [PYR] [mailto:David.Leung@ec.gc.ca]
Sent: Wednesday, July 30, 2014 4:27 PM
To: Smith, Alanya C EAO:EX
Subject: Woodfibre VC Selection comments

<<2014-07-30_WoodfibreLNG_VC_EC_Comments_CoverLetter.pdf>> Go <<2014-07-30_Attachment1_Woodfibre_dAIR_ECCommentsonVCs_Final.pdf>> od Afternoon Alanya,

Apologies for the delay, here are Environment Canada's cover letter and comments on the VC Selection for the Woodfibre LNG Project.

Regards,

David Leung
 Environmental Assessment Officer
 Environmental Protection Operations Directorate | Direction des activités de protection de l'environnement Pacifique and Yukon Region | Région du Pacifique et du Yukon Environment Canada | Environnement Canada Government of Canada
 | Gouvernement du Canada
 401 Burrard Street | 401 rue Burrard
 Vancouver, BC, V6C 3S5 | Vancouver, C-B, V6C 3S5 David.Leung@ec.gc.ca
 604-666-3606

Mayall, Jane EAO:EX

FILE COPY

From: Smith, Alanya C EAO:EX
Sent: Wednesday, July 30, 2014 4:56 PM
To: Lara Taylor (ltaylor@hemmera.com); 'Byng Giraud'
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: 30050-20/WLNG-05-06 FW: Woodfibre VC Selection comments
Attachments: 2014-07-30_WoodfibreLNG_VC_EC_Comments_CoverLetter.pdf; 2014-07-30_Attachment1_Woodfibre_dAIR_ECCommentsonVCs_Final.pdf

Comments on the dAIR from environment Canada.

Thank you,
Alanya

-----Original Message-----

From: Leung, David [PYR] [<mailto:David.Leung@ec.gc.ca>]
Sent: Wednesday, July 30, 2014 4:27 PM
To: Smith, Alanya C EAO:EX
Subject: Woodfibre VC Selection comments

<<2014-07-30_WoodfibreLNG_VC_EC_Comments_CoverLetter.pdf>> Go <<2014-07-30_Attachment1_Woodfibre_dAIR_ECCommentsonVCs_Final.pdf>> od Afternoon Alanya,

Apologies for the delay, here are Environment Canada's cover letter and comments on the VC Selection for the Woodfibre LNG Project.

Regards,

David Leung
Environmental Assessment Officer
Environmental Protection Operations Directorate | Direction des activités de protection de l'environnement Pacifique and Yukon Region | Région du Pacifique et du Yukon Environment Canada | Environnement Canada Government of Canada | Gouvernement du Canada
401 Burrard Street | 401 rue Burrard
Vancouver, BC, V6C 3S5 | Vancouver, C-B, V6C 3S5 David.Leung@ec.gc.ca
604-666-3606



Environment Canada Environnement Canada

Environmental Protection Operations
Environmental Stewardship Branch
Pacific and Yukon
201 - 401 Burrard Street
Vancouver, BC V6C 3S5

July 30, 2014

CEAR: 80060
ECPT: 13-1201

Alanya Smith
Environmental Assessment Office
Project Assessment Manager
836 Yates Street
Victoria, BC V8W 1L8

Dear Ms. Smith:

**Re: Environmental Assessment of the Proposed Woodfibre LNG Project –
Environment Canada Comments on the Woodfibre LNG Valued Component
Selection Document (June 4, 2014)**

Environment Canada (EC) has completed a review of the following document:

- Woodfibre LNG Valued Component Selection Document.

EC comments attached are founded on the departmental mandate and are focused on matters related to wildlife, vegetation, and wetlands. Attachment 1 provides contextual information on EC's mandate as it relates to the proposed Woodfibre LNG Project (the Project) and comments on Valued Components, including wildlife, vegetation, and wetlands.

As the Minister of Environment granted substitution of this assessment to the BC Environmental Assessment Office (EAO) on February 19, 2014, EC is participating as a Federal Authority pursuant to Section 4(b) of the *Memorandum between the Canadian Environmental Assessment Agency and the British Columbia Environmental Assessment Office on Substitution of Environmental Assessments* (2013).

I trust that these comments will be of assistance in advancing the environmental assessment of the Project. In the interim, if you have any questions or concerns, please do not hesitate to contact me at 604-666-3606.

Yours sincerely,

[ORIGINAL SIGNED BY]

David Leung
Environmental Assessment Officer

Attach. (1)

Canada

ATTACHMENT 1: EC COMMENTS ON WOODFIBRE LNG VALUED COMPONENT SELECTION COMMENTS

Section 4.0: Identification and selection of valued components and spatial boundaries

Section 4.1 Issues Scoping

EC notes that the 'Vegetation Communities' Valued Component (VC) is absent from Table 4-1, Section 4.1 of the VC Selection Document. Project activities would most likely impact this VC through the construction, operation, and decommissioning and reclamation phases of the project. EC recommends that Vegetation Communities be included in this table to ensure an assessment of potential Project impacts to this VC.

Section 4.2 Selected Valued Components

WILDLIFE

Appendix A of the VC Selection Document lists the VCs that have been evaluated and proposed for inclusion in the dAIR. EC advises that additional information with respect to wildlife that the Project would potentially impact is needed for the purposes of the environmental assessment review.

Specifically, EC recommends including additional indicators for each VC, taking into account such things as the following:

- All SARA Schedule 1, 2 and 3 species (mammals, bird, reptiles, amphibians, arthropods, molluscs)
- COSEWIC-assessed species listed as Endangered, Threatened or of Special Concern species (mammals, bird, reptiles, amphibians, arthropods, molluscs)
- Provincially-listed red, blue and yellow species (mammals, bird, reptiles, amphibians, arthropods, molluscs)
- Breeding birds and breeding bird communities
- Wintering and migrating (staging) birds
- Migratory birds and species at risk habitats, including, for example:
 - Protected areas and Important Bird Areas
 - Areas identified as Critical Habitat in any posted proposed or final Recovery Strategy
 - Wetland habitats (that are not currently designated as a protected area)
 - Habitats supporting wintering or staging migratory birds (that are not currently designated as protected areas)
- Habitat sensitivity to disturbance and pollution

Appendix A of the VC Selection Document lists the VCs and Indicator Species that the Project has the potential to interact with. Terrestrial mammals, amphibians, and birds have been selected and listed as indicator species. To ensure that the species are representative of the wildlife values, EC recommends that:

- A science-based rationale be provided on the appropriateness of each species to function as an indicator species.

EC also recommends that:

- The dAIR include an indicator species for the 'At-Risk Bats' VC.

The proponent is encouraged to consult with Environment Canada's Canadian Wildlife Service (CWS) with any questions regarding the evaluation of SARA-listed species for the purposes of the environmental assessment.

Migratory Birds

EC's mandate includes the protection, conservation and management of migratory birds and their habitat. The purpose of the *Migratory Birds Convention Act, 1994 (MBCA)* is to implement the Migratory Birds Convention between Canada and the United States by protecting and conserving migratory birds, as populations and as individual birds. Regulations made under the MBCA provide, inter alia, for the conservation of migratory birds and the protection of their nests and eggs. Section 6 of the *Migratory Birds Regulations (MBR)* sets out prohibitions including those related to the disturbance, destruction, or taking of a nest, egg or nest shelter of a migratory bird. Subsection 5.1 of the MBCA sets out prohibitions that include the deposition by a person or vessel of substances harmful to migratory birds in waters or areas frequented by migratory birds or in a place from which the substance may enter such waters or such an area.

Migratory birds, the nests of migratory birds and/or their eggs can be inadvertently harmed or disturbed as a result of shipping activities—including but not limited to being struck by or disturbed by vessels, being drawn in by onboard lighting, or being captured or harmed by fishing gear. This inadvertent harming, killing, disturbance or destruction of migratory birds, nests and eggs is known as incidental take. Incidental take, in addition to harming individual birds, nests or eggs, can have long-term consequences for migratory bird populations in Canada, especially through the cumulative effects of many different incidents. For further details, please refer to the Incidental Take website at: <http://ec.gc.ca/paom-itmb/default.asp?lang=En&n=C51C415F-1>

EC further advises that Proponents should be aware that construction during the nesting period for migratory birds carries with it high risk of incidental-take. Many bird nests are difficult to locate, even with highly trained observers. Proponents should be aware of the risks and take appropriate action to ensure they are in compliance with the MBCA.

EC recommends that:

- In the selection of migratory bird VC's and indicator species, that species are selected that represent different habitats and guilds, including marsh birds, shorebirds, raptors (diurnal and nocturnal species), songbirds that occupy different habitats, waterfowl, swallows and cavity nesters

The Project falls within Bird Conservation Region 5: Northern Pacific Rainforest. The indicator species chosen do not represent all bird guilds. EC therefore recommends that:

- The Proponent refer to the Bird Conservation Strategy for Bird Conservation Region 5: Northern Pacific Rainforest for guidance on the selection of additional indicator species, or provide a science-based rationale as to why certain bird guilds were not included as indicator species. The document can be accessed at <http://nabci.net/Canada/English/pdf/BCR%205%20PYR%20FINAL%20Feb%202013.pdf>.

Marbled Murrelet

Marbled Murrelet are listed as threatened under Schedule 1 of SARA. EC posted the final Recovery Strategy for the Marbled Murrelet (*Brachyramphus marmoratus*) in Canada on the SARA Public Registry June 3rd 2014. The finalized recovery strategy identifies critical habitat to the extent possible for each conservation region. While day to day management of Marbled Murrelet is generally a provincial responsibility, EC is responsible for developing a Recovery Strategy for the species under SARA, and for downstream SARA requirements such as the protection of all identified critical habitat.

The federal Recovery Strategy¹ identifies critical habitat to the extent possible. More precise boundaries may be mapped, and additional critical habitat may be added in the future if additional research supports the inclusion of areas beyond those currently identified.

Marbled Murrelet is excluded in the 'Avifauna' VC (Section 4.3, Table 4-3). Based on a preliminary analysis, Environment Canada found that the proposed Woodfibre LNG (Project) site is located in proximity to areas that have been identified as potentially suitable for Marbled Murrelet nesting habitat.

Critical habitat for the Marbled Murrelet is defined as that portion of the suitable habitat necessary for the survival and recovery of the species as specified by the population and distribution objectives in the recovery strategy. Only partial identification of nesting critical habitat is included in the recovery strategy at this time; and information is not yet available to identify marine critical habitat. Nesting critical habitat has been identified to attain a state where greater than 70% of the total suitable nesting habitat available in 2002 is retained, coast-wide. There are recommended regional retention proportions based on the degree of historic habitat loss. A retention target of greater than 85% of 2002 suitable nesting habitat is recommended for the Marbled Murrelet conservation region where the proposed Project site is located.

Marbled Murrelets require both terrestrial habitat (i.e., coniferous old-growth forest within 50 km of the ocean) to support nesting and marine habitats (0.5 to 2 km of the shore) for foraging and moulting. Both habitat types need to be considered in recovering and managing the species. Primary threats are the direct loss of old-growth nesting habitat through forest harvesting, or clearing of land. These activities can create hard forest stand edges adjacent to remaining suitable habitat that increase opportunity for nest predator access into suitable nesting sites (e.g., crows and jays), and which alter the microclimate necessary to support microhabitat attributes (e.g., development of mossy platforms for nesting). Most of the microclimate effects occur within

¹ Environment Canada. 2014. Recovery Strategy for the Marbled Murrelet (*Brachyramphus marmoratus*) in Canada. *Species at Risk Act Recovery Strategy Series*. Environment Canada, Ottawa. v + 49 pp.

the first 50-100 m of forest adjacent to the hard edge, suggesting distance thresholds may be important directly adjacent to critical habitat boundaries, though the work to establish such thresholds has not yet been done. The effects of hard edges may diminish over time with re-vegetation. Marbled Murrelets are also easily disturbed by the passage of boats. Proposed increases in natural resources exports via B.C. ports and increases in shipping traffic have the potential to increase the risk in the core of the Marbled Murrelets range and is likely to cause Marbled Murrelets to avoid otherwise suitable foraging habitat.

Further to the recovery strategy, the Avoidance Guidelines on Incidental Take (<http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=AB36A082-1>) suggest that mitigation measures are to be determined, implemented and monitored to avoid engaging in potentially destructive or disruptive activities at key locations (i.e. critical habitats) or during key periods (i.e., breeding season) that may affect Marbled Murrelet as a species protected under SARA and the MBCA.

EC recommends that:

- The EIS provide a map of the project design and footprint and any potential overlap with MAMU CH or suitable habitat
- Any monitoring on Marbled Murrelet be conducted in accordance with standardized methods (e.g. RISC 2001).

Amphibians

A change in water quality can have an adverse effect on amphibian populations. Amphibians are sensitive to low pH especially during the fertilization and embryonic development stage. Low pH can cause developmental abnormalities, delay or failing to hatch, delay in embryonic development and increased fungal growth on eggs. These factors can affect the overall survivorship of amphibian populations. Similarly, other water quality parameters including but not limited to dissolved oxygen, temperature, trace metals, conductivity and turbidity can have adverse effects on amphibians.

Based on the above, Environment Canada recommends that:

- Potential effects of water quality (as indicated in Table 4-2) include amphibians; and,

VEGETATION COMMUNITIES

The 'Vegetation Community' VC in table 4-2, section 4.2 includes at-risk ecosystems, rare plants, and wetlands. EC recommends that:

- The Vegetation Community indicators include mosses and lichens to determine whether there are any federally-listed species in the Project area.

Wetlands

Wetlands are one of the key life supporting systems on the planet, are habitat to many endangered wildlife and plant species and perform essential ecological and socio-economic functions. It appears that wetlands were selected as a VC under Vegetation Resources as mentioned under Table 4-2.

EC recommends that:

- Consideration be given to having wetlands, including estuaries, selected as a separate VC given the range of overlap with other areas of interest, including for example hydrology, water quality, and wildlife.

Further to the above, potential Project effects on wetlands, including estuaries, include but are not limited to, loss or impairment of wetland ecological functioning in relation to such things as wildlife and wildlife habitat water quality, hydrology, plant community make-up, and traditional use..

Based on the above, EC also recommends that:

- The wetland assessment also include:
 - A detailed evaluation of wetland functions; and,
 - Identification of provincially red- and blue-listed ecological communities within wetland communities.

Refer to Appendix 1 for advice regarding application of the *Federal Policy on Wetland Conservation*, the wetland mitigation hierarchy, and information needs in development of a wetland compensation plan.

Table 4.5 Proposed General Methods for Data Collection

WILDLIFE

For all species listed on Schedule I of SARA, that the Project would potentially impact, Environment Canada (EC) recommends that:

- The Proponent assess Project effects on a species-specific basis and provide mitigation plans specific to each species.

EC recommends that:

- If a listed species is not identified, surveyed and assessed as part of the Application, that a clear justification be provided as to why.

EC recommends that:

- If species are assessed through community indicators, that the Proponent provide a rationale as to how this community indicator would achieve a science-based assessment of effects on each federally-listed species.

Avifauna

EC recommends that:

- Wildlife Resource Surveys for birds evaluate, as relevant to the Project area: marsh birds, shorebirds, raptors (diurnal and nocturnal species), songbirds that occupy different habitats, waterfowl, swallows and cavity nesters
- That migratory bird, species at risk, and vegetation surveys be spatially linked so that habitat functioning for specific species can be evaluated on a habitat (vegetation community) basis. Further to the second bullet, that the migratory bird and species at risk surveys data be evaluated in relation to habitat (vegetation community) use; specifically: species abundance, distribution, and density in each vegetation community of the Project area
- That the assessment evaluate migratory bird/species at risk seasonal use (breeding, migration, and overwintering) of the Project area

Western Toad

Western Toad has been assessed by COSEWIC and is listed as a species of 'Special Concern' on Schedule I of the SARA. EC recommends that:

- Surveys be conducted for this species for the purposes of the environmental assessment; specifically, that surveys be conducted to assess breeding and migration activity.

For migration, road surveys should follow the *Resources Information Standards Committee* (RISC) Standards). Careful attention should be paid to timing (months and time of day) of surveys in order to ensure it is conducted during peak movements of adults and juveniles. Road surveys are best conducted during or after rainfall.

At-risk Bat Species

Caves, mines and tall rock faces with deep fissures are likely the primary hibernacula and possible roosting habitat for bats.

EC recommends that:

- Desk tops surveys in combination with field surveys be conducted to evaluate bat activity in relation to any cliff/cave features.

EC advises that habitat assessments and mapping are preliminary steps in locating landscapes with features that could support bat roosts/hibernacula. Field surveys employing methodologies such as radio-tracking, mist netting, inventories of bats inside caves or mines or acoustic monitoring with bat detectors should be evaluated for locating roosting/hibernaculum elements. For additional information, refer to the RISC survey methods (RISC 1998).

VEGETATION COMMUNITIES

EC brings to the attention of the Proponent the SEI mapping standards (Standard for Mapping Ecosystems at Risk in British Columbia at

http://archive.ilmb.gov.bc.ca/risc/pubs/teecolo/habitat/assets/standards_for_mapping_ear_version1.pdf, which exists in addition to the TEM standards.

EC recommends that:

- The dAIR include SEI and/or TEM mapping in support of the 'Vegetation Community' VC.

References

- Bellefleur, D. P. Lee and R.A. Ronconi. 2008. The impact of recreational boat traffic on Marbled Murrelets. *Journal of Environmental Management*. [ePub].
- Hamer, T.E., and Thompson, C., 1997, Avoidance of boats by Marbled Murrelets during marine surveys: Olympia, Washington, U.S. Fish and Wildlife Service, 17 p.
- Kuletz, K. J. 1996. Marbled murrelet abundance and breeding activity at Naked Island, Prince William Sound, and Kachemak Bay, Alaska, before and after the Exxon Valdez Oil Spill. *American Fisheries Society Symposium* 18:770–784.
- RISC (Resources Information Standards Committee). 2001. Inventory methods for Marbled Murrelets in marine and terrestrial habitats, Version 2.0. Standards for components of British Columbia's biodiversity, No. 10. Ministry of Environment, Lands and Parks, Resources Inventory Branch, Victoria, BC. URL: <http://www.ilmb.gov.bc.ca/risc/pubs/tebiodiv/murrelet2k1/mamu%20ml20.pdf>
- RISC (Resources Information Standards Committee). 1998. Inventory Methods for Bats, Version 2.0. Standardized inventory methodologies for components of British Columbia's biodiversity, No. 2.0. Ministry of Environment, Lands and Parks, Resource Inventory Branch, Victoria, BC. URL: <http://www.for.gov.bc.ca/hts/risc/pubs/tebiodiv/bats/index.htm>

Mayall, Jane EAO:EX

FILE COPY

From: Smith, Alanya C EAO:EX
Sent: Wednesday, July 30, 2014 9:46 AM
To: Lara Taylor (ltaylor@hemmera.com); 'Byng Giraud'; 'Amanda Zinter'
Cc: Paulson, Amber EAO:EX; Mayall, Jane EAO:EX
Subject: 30050-20/WLNG-05-06 FW: For Review: Draft #2 AIR for Woodfibre LNG - final HC comments
Attachments: July 28_dAIR Responses_toWG_2_HC final comments.xlsx

Please find comments from HC attached.

Thank you

From: Yota Hatziantoniou [<mailto:yota.hatziantoniou@hc-sc.gc.ca>]
Sent: Tuesday, July 29, 2014 3:38 PM
To: Smith, Alanya C EAO:EX
Cc: Paulson, Amber EAO:EX; Mayall, Jane EAO:EX; Herbert Antill
Subject: Re: For Review: Draft #2 AIR for Woodfibre LNG - final HC comments

Hi Alanya,

As requested attached are Health Canada's final comments on the latest version of the Woodfibre LNG draft AIR (dated July 2014 - version 2).

Thank you for the opportunity to comment.

Yota

Yota Hatziantoniou, BSc, MSc (Plan)

Regional Environmental Assessment Coordinator
Health Canada / Government of Canada
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Woodfibre LNG Project – Draft VC Selection/ Draft AIR Working Group Comment Tracking Table

Date: May 27, 2014
 Files:
 Revision:

Comment ID#	Date Submitted	Submitter name and title	Agency/ Affiliation	Comments relevant to draft VC submission or dAIR?	Relevant section and page number. Comments/ Issue Description/ Suggested Changes	Category/ Theme	Change to the draft VC selection/ dAI Required?	Application Review and/or Permitting Requirement?	Proponent's Response	dAIR Round 2- Due April 1, 2014
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Woodfibre LNG Project – Draft VC Selection/ Draft AIR Working Group Comment Tracking Table

Date: May 27, 2014
 File:
 Revision:

Comments ID#	Date Submitted	Submitter name and title	Agency/ Affiliation	Comment relevant to draft VC selection or dAIR?	Relevant section and page number. Comment/ Issue Description/ Suggested Changes	Category/ Theme	Change to the draft VC selection/dAI R required?	Application Review and/or Permitting Requirement?	Proponent's Response	dAIR Round 2 - Due Aug 11, 2014
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Comment ID	Date Submitted	Submitter Name and Title	Agency Affiliation	Comment relevant to draft VC selection or dAIR?	Relevant section and page number	Comment/Issue Description/ Suggested Changes	Category/Theme	Change to the draft VC selection/ dAIR request?	Application Review and/or Permitting Requirement?	Proponent's Response	dAIR Round 2 – Due Aug 11, 2014
10	26-May-14	Yota Hatilantonlou, Regional Environmental Assessment Coordinator	Health Canada (HC)	dAIR	Table 5-1 (pg. 46)	With respect to assessing low frequency noise (vibration), HC suggests that the Proponent reference guidance from the American National Standards Institute (ANSI), 2005.	Atmospheric Sound	No	Application Review, Permitting Requirement OGC and Worksafe BC	Health Canada recommends considering American National Standards Institute (ANSI), 2005 when assessing low frequency noise (LFN), which indicates that the sum of the un-weighted noise levels in the 16 Hz, 31.5 Hz, and 63 Hz octave-bands should not exceed 70 dB. As the ISO 9613-2 based calculation algorithm that will be used to predict noise levels associated with the Project does not consider the 16 Hz octave-band, and noise source emission data is generally not available in the 16 Hz octave band, this calculation cannot be completed and will not be considered in this assessment. Instead, the noise assessment will consider the OGC British Columbia Noise Control Best Practices Guideline and Alberta Energy Regulator document Directive 038: Noise Control when assessing LFN.	Noted.
15	26-May-14	Yota Hatilantonlou, Regional Environmental Assessment Coordinator	Health Canada	VC	Table 2 (pg. 15)	HC advises EAO that the "Site Contamination" intermediate component also provide a summary of any studies that may relate to country foods contamination, if applicable.	Site Contamination/ Public Health	Yes	Application Review	Section 5.7.1 has been updated as follows (changes in red): Site contamination was selected as an IC and will be summarized in the Application because there is a potential pathway for disturbance and mobilisation of historical contamination during construction activities to affect ICs and VCs, including water quality, freshwater fish and fish habitat, and human health. Section 5.7.3 has been amended as follows: Information from this section will be cross-referenced to other ICs and VCs on the pathways of effect related to site contamination, as applicable: -Section 9.2 Public Health	HC accepts this response.
16	26-May-14	Yota Hatilantonlou, Regional Environmental Assessment Coordinator	Health Canada	dAIR	Table 4-3 (pg. 33), section 5.5.1.1 (pg. 52)	For the "Site Contamination" intermediate component, HC suggests that a rationale be provided for why the RAA is the same as the LAA. If there is any potential for the migration of contaminants beyond the Woodfibre property, HC suggests that a larger RAA be considered.	Site Contamination	Yes	Application Review	Section 5.7.1.1 (Spatial Boundaries) has been updated as shown below. Local Assessment Area: The Project Area Regional Assessment Area: Same as the LAA. WFP has committed to obtaining a BC MOE COC prior to transferring the Woodfibre property to the Proponent. In order to obtain a COC, the remediation must demonstrate that contaminants are not continuing to discharge into aquatic environments and demonstrate that existing contaminants left in situ and remediated to risk-based standards will not have adverse effects on the environment or human health.	HC accepts this response.
21	26-May-14	Yota Hatilantonlou, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC: Table 2 (pg. 15) & dAIR: Table 5-5 (pg. 54)	HC advises EAO that the parameters for the "Surface Water Quality" intermediate component also include any organic and inorganic contaminants of potential concern, if these have been identified in previous contaminated sites studies for the Woodfibre property. HC would prefer that this additional information be considered if there are any recreational or drinking water uses on/near the project site.	Surface Water Quality	Yes	Application Review	The following text has been added to Section 5.8.3 of the dAIR: Contaminants related to site contamination will not be included in this section because they are being addressed by others for the COC. Current site investigations are underway to study the potential effects that may be caused by disturbance and mobilisation of historical contamination, and the potential effects are addressed through identified remediation strategies. WFP has committed to obtaining a COC from MOE prior to transferring the Woodfibre property to the Proponent. In order to obtain a COC, the remediation must demonstrate that contaminants are not continuing to discharge into aquatic environments and that existing contaminants left in situ and remediated to risk-based standards will not in future be re-mobilized. Section 5.7 Site Contamination of the Application will include a summary of the site investigation findings and conclusions.	Noted.
33	26-May-14	Yota Hatilantonlou, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC: Table 2 (pg. 15) & dAIR: Table 5-7 (pg. 58)	HC advises EAO that there appears to be a discrepancy in the parameters listed for the "Marine Water Quality" intermediate component (IC) presented in the VC document, versus the dAIR. HC prefers that any organic and inorganic contaminants of potential concern be considered for this IC – especially if there are any recreational and fishing uses near the project site.	Marine Water Quality	Yes	Application Review	Table 5-9 in the dAIR has been updated to be more specific regarding the concentrations of biological and chemical contaminants of potential concern associated with treated process water, wastewater and stormwater discharges. Table 5-9 includes the following parameters: suspended sediment, turbidity, temperature, total residual chlorine, nutrients, metals, hydrocarbons, dissolved oxygen, pH and conductivity. Targeted dredging in the area has already removed some of the legacy contaminants from sediments; however, results indicate remaining sediments in other parts of the Project area contain dioxins and furans, which can be remobilized into the water if sediments are disturbed. These contaminants will need to be included in the assessment and have been added to Table 5-9.	HC accepts this response.

Comment ID#	Date Submitted	Submitter name and title	Agency/ Affiliation	Comment relevant to draft VC selection or dAIR?	Relevant section and page number	Comment/Issue/Description/Suggested Change	Category/Theme	Change to the draft VC selection/dAIR required?	Application Review and/or Permitting Requirement?	Proponent's Response	SAIR Round 2 – Due Aug 12, 2014
35	26-May-14	Yota Hatzilantonlou, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC: Table 1 (pg. 10), Appendix A (pg. 1) & dAIR: Table 4-1 (pg. 26), Table 5-8 (pg. 60)	For the "Atmospheric Environment" VC, HC advises EAO that the Proponent also include H2S, ozone, and metals (as applicable) in the VC/AIR/Application documents, along with the other criteria air contaminants (CACs) indicated. Otherwise, HC advises that the Proponent provide a strong justification for any CACs that are not being considered in the air quality assessment (e.g., H2S, ozone etc.). It is HC's understanding that the Province of BC has developed 'Interim' AAQDs for 1-hr NO2 and 1-hr SO2 (to be officially released at a later date), and that these are below the current published objectives for NO2 and SO2. HC suggests that the Proponent undertake an analysis of predicted concentrations of NO2 and SO2 against both the Interim BC objectives and/or the objectives of other jurisdictions (e.g., World Health Organization), as may be applicable. This advice is provided in anticipation of lower NO2 and SO2 objectives being in effect during Project construction/operation, and with the expectation that these lower objectives will be more protective of human health. Finally, HC suggests that a full inventory be provided of all potential air pollutants, including any refrigerants, solvents or other process chemicals (and their by-products) that may be vented, combusted, or accidentally released into the atmosphere. This would enable a better understanding of surrounding population exposure and potential risk.	Atmospheric Environment (Air Quality)	yes	Application Review and Permitting Requirement OGC	The effects assessment will consider relevant emissions based on Project-specific engineering data on air emissions. We are aware of the forthcoming NO ₂ and SO ₂ BC air quality standards, but understand that they have not currently been released by the MoE. These criteria will be considered within the effects assessment, if they are available within a time period that permits inclusion in the effects assessment. The potential for fugitive emissions and emergency scenarios will be considered within the effects assessment. The following text has been added to Section 5.2.3 of the dAIR. The air quality effects assessment will consider ground-level ozone as well as H2S (should H2S be emitted from the Project). Based on discussions to date with the MoE on the conceptual model plan, the potential Interim BC SO2 and NO2 ambient air criteria will be considered in the effects assessment. However, we don't recommend any change to the AIR, since the potential new criteria under consideration have not been made available to the public yet.	HC accepts this response.
36	26-May-14	Yota Hatzilantonlou, Regional Environmental Assessment Coordinator	Health Canada	dAIR	Section 5.9 (pg. 58) – general comment	As part of the "Atmospheric Environment" VC, HC advises EAO that the Proponent assess an additional "emergency flaring/back-up power generation" scenario. The current assessment steps for this VC do not capture this potential scenario – the results of which would help to characterize potential adverse effects to humans.	Atmospheric Environment (Air Quality)	yes	Application Review	The following text has been added to Section 5.2.3 of the dAIR. The Application will consider emissions to air from the LNG facility, including emergency scenarios undertaken for the Project operation phase, and associated shipping activities.	HC accepts this response.
82	26-May-14	Yota Hatzilantonlou, Regional Environmental Assessment Coordinator	Health Canada	dAIR	Section 7.4.2 (pp. 133-144)	HC suggests that the "Land and Resource Use" VC also cross-references baseline information from available Traditional Land Use Studies to incorporate Aboriginal uses of the Project area, where appropriate to do so.	Land and Resource Use	yes	Application Review	W LNG confirms that any available Traditional Land Use studies will be cross-referenced as appropriate, as indicated in Section 7.4.1. The Application will include a description of legislation, guidelines, BMPs, and guidance documents that are relevant to the management of the Land and Resource Use VC. If available, the Application will also describe how TK (traditional knowledge) and TU (traditional use) information, as obtained through consultation with Aboriginal groups and other sources were used in the assessment.	HC accepts this response.
92	26-May-14	Yota Hatzilantonlou, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC: Table 1 (pg. 15), Appendix A (pg. 5) & dAIR: Table 4-1 (pg. 29)	HC prefers that the "Public Health" VC be retitled "Human Health" VC, so that it is inclusive of both public and Aboriginal health considerations.	Public Health	yes	Application Review	Woodfibre does not intend to exclude Aboriginal health by using "Public Health" as the VC name. Aboriginal health factors will be included. The term Public Health is used because the EA will include a type of Human Health Risk Assessment (HHRA). The HHRA will include some socio-economic indicators in addition to the risk calculations. The public health assessment will include a human health risk assessment and information about key social determinants of health to provide an assessment of community health and well-being. The public health assessment will be inclusive of Aboriginal health.	HC accepts this response.

Mayall, Jane EAO:EX

FILE COPY

From: Smith, Alanya C EAO:EX
Sent: Tuesday, July 29, 2014 1:34 PM
To: 'Byng Giraud'; Lara Taylor (ltaylor@hemmera.com); 'Amanda Zinter'
Cc: Paulson, Amber EAO:EX; Mayall, Jane EAO:EX
Subject: 30050-20/WLNG-05-06 Public consultation report

Hello,

I understand that WLNG used a document called the "Community Consultation – Discussion Guide and Feedback Form" at the public open house in Squamish (and perhaps more broadly). Please ensure that the comments collected through this form are presented and addressed in the Public Consultation Report due on August 27.

If you have any questions please let me know.

Thank you,
Alanya

Alanya Smith | Project Assessment Manager | Environmental Assessment Office | Tel: (250) 387-2406 | BB: 71'S
71'S | Fax: (250) 387-2208

Mayall, Jane EAO:EX

FILE COPY

From: Smith, Alanya C EAO:EX
Sent: Tuesday, July 29, 2014 12:37 PM
To: 'Lara Taylor'; Paulson, Amber EAO:EX; 'Amanda Zinter (Amanda_Zinter@wlng.ca)'; 'Byng Giraud (byng_giraud@wlng.ca)'
Cc: Mayall, Jane EAO:EX
Subject: 30050-20/WLNG-05-06 WG review of draft 2 AIR

Hello,

Yesterday we shared the draft 2 version of the AIR and the tracking table with the WG and requested comments by the end of day on August 11.

As discussed at our meeting, I would encourage you to follow up directly with WG members as needed to work to resolve any outstanding questions or issues. I understand that there are a couple of items where information will be provided in the next couple of days that we will then forward to the working group.

If you have any questions please let me know.

Thank you,
Alanya

Mayall, Jane EAO:EX

From: Smith, Alanya C EAO:EX
Sent: Monday, July 28, 2014 9:33 AM
To: 'Byng Giraud'; Lara Taylor (ltaylor@hemmera.com); 'Amanda Zinter'
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: 30050-20/WLNG-05-06 FW: SCRD Comments re Woodfibre LNG Valued Components
Attachments: 2014-Jul-26 SCRD Board resolutions and consultative groups comments.pdf

Good morning,

The formal public comment period for WLNG closed last night at midnight. We received about 500 comments over the weekend. Staff are working to post the new comments over the course of the week with the aim of having all posted by the end of this week.

Please see the attached letter and comments from SCRD and consider these comments as working group comments to address in the next round of review.

We anticipate receiving the working group tracking table and next draft AIR from you later today and I intend to send to the working group for their review.

If you have any questions, please give me a call.

Thank you,
 Alanya

Alanya Smith |Project Assessment Manager| Environmental Assessment Office | Tel: (250) 387-2406 | BB: 21.S
 21.S | Fax: (250) 387-2208

From: David Rafael [<mailto:David.Rafael@scrd.ca>]
Sent: Sunday, July 27, 2014 4:19 PM
To: Smith, Alanya C EAO:EX
Subject: SCRD Comments re Woodfibre LNG Valued Components

Hi Alanya

Please find attached the SCRD Board and staff comments regarding the Woodfibre LNG Valued Components.

Regards,
 David

David Rafael
 Senior Planner
Sunshine Coast Regional District
 1975 Field Road, Sechelt, BC, V0N 3A1

phone: 604 885 6804 ext 4 (direct line)
604 885 6800 (Reception)
fax: 604 885 7909

My office hours are Monday to Friday from 8:30 a.m. to 4:30 p.m.

Follow us on Twitter at [sunshinecoastrd](#)
Visit us: www.scrd.ca

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www.scrd.ca



July 27, 2014

BY E-MAIL: Alanya.Smith@gov.bc.ca

Alanya Smith
Project Assessment Manager
Environmental Assessment Office
PO Box 9426 Stn Prov Govt
Victoria BC V8W 9V1

Dear Ms Smith:

**RE: Additional Comments regarding Woodfibre LNG Valued Components
Public Consultation**

Further to the SCRD Boards comments on the Valued Components for the Woodfibre LNG environmental assessment submitted on May 29, 2014.

The SCRD referred the documents to its West Howe Sound (Area F) Advisory Planning Commission (APC) and Natural Resources Advisory Committee (NRAC) for consideration. The SCRD's Agricultural Advisory Committee (AAC) also provided some comments. The comments from these three consultation bodies are attached along with a copy of the SCRD letter submitted on May 29, 2014.

The SCRD Board's recent resolutions regarding the proposal are also attached for consideration.

The SCRD Board expressed concern regarding the potential impact of the tankers on boating in the area as there may be a requirement for an exclusion/safety zone around each tanker as it moves through the Sound. If this is the case then this will disrupt tourism, recreation and the ferry traffic that is vital to the Sunshine Coast. As part of the EA review, the SCRD requests that the issue of an exclusion/safety zone be explained and if such a zone is a requirement then the applicant needs to set out the potential impacts and mitigation measures as part of the application information that will be submitted in due course.

The SCRD's Agricultural Advisory Committee meeting raised questions about the potential for emissions from the proposed LNG plant and tankers to impact agriculture in the area. In discussions with SCRD staff, members raised concern about the possible impact of particulates on farm operations that are trying to achieve or maintain organic

classification. Staff request that this issue also be considered as part of the application information that will be submitted in due course.

At the July 17, Planning and Development Committee, a presentation was made by Eoin Finn, a concerned member of the public, about the proposal. Staff note that one item raised by Mr. Finn is of particular interest: is there a seasonality of LNG production such as a decrease in production in the winter and a corresponding increase in the summer? If so this will increase the tanker frequency during high production periods, likely during the period when there is a peak in recreational; boating use of Howe Sound. Is this the case and if so what mitigation measures will be proposed?

Questions were also raised about the safety of LNG tankers and staff understand that this issue will be considered in detail in the application that will be submitted by Woodfibre LNG Limited.

Please contact me if you have any questions (604 885 6804 ext 4 or david.rafael@scrd.ca).

Yours truly,

SUNSHINE COAST REGIONAL DISTRICT



David Rafael
Senior Planner

Enclosures: SCRD Board Resolutions (July 24, 2014)
Minutes from SCRD Area F APC, NRAC and AAC meetings
SCRD Letter Dated May 29, 2014

cc: Woodfibre LNG Limited

SUNSHINE COAST REGIONAL DISTRICT

July 24, 2014

MINUTES OF THE MEETING OF THE BOARD OF THE SUNSHINE COAST REGIONAL DISTRICT HELD IN THE BOARDROOM AT 1975 FIELD ROAD, SECHELT, B.C.

Recommendation No. 3 *Proposed Woodfibre LNG project*

THAT information received from constituents on the Sunshine Coast regarding the Woodfibre LNG project be presented by staff at meetings of the Advisory Working Group for the proposed project;

AND THAT staff schedule a meeting with Ms. Alanya Smith, Project Assessment Manager for the proposed Woodfibre LNG project and the SCRD Board to discuss concerns related to this project;

AND FURTHER THAT staff raise the issue of concern regarding the required safety zone for the passage of LNG tanker traffic and the width of Howe Sound during the meeting with Ms. Smith, Project Assessment Manager for the proposed Woodfibre LNG project.

Recommendation No. 17 *LNG Tankers in Howe Sound and Georgia Strait*

THAT a copy of the Town of Gibsons resolution R2014-250 regarding LNG Tanker Traffic in Howe Sound and Georgia Strait adopted at the July 15, 2014 regular council meeting be received;

AND THAT the SCRD urge the federal government to ban the passage of LNG tankers in the waters of Howe Sound and Georgia Strait.

**SUNSHINE COAST REGIONAL DISTRICT
NATURAL RESOURCES ADVISORY COMMITTEE MINUTES
Rockwood Lodge, Sechelt BC
Wednesday July 16, 2014**

(NOTE: The SCRD Board has not yet received the minutes from this meeting of the Natural Resources Advisory Committee, this will take place at a Board meeting in September)

4.1 Woodfibre LNG – Environmental Assessment Valued Components Consultation

In discussion of this item, the following points were noted.

- Some recommendations provided by the SCRD have not been adopted by the proponent. In particular, the proponent has not held public consultation meetings in Gibsons.
- Safety record for transport of LNG is good. However, Howe Sound provides unique challenges for tanker transport. It is a narrow fjord with frequent ferry and recreational marine traffic.
- There is some confusion about the role of NRAC with respect to this issue: should NRAC focus on contributing to the list of Valued Components to ensure the items are relevant, measurable and complete?
- Air quality issues due to leaks and/or emissions will be influenced by geography. Howe Sound is a relatively contained area and air pollution may not dissipate. Ability to provide shore power to tankers would reduce air pollution in the Sound.
- It would be helpful to know regulations about dumping effluent from ships (e.g. ballast and sewage) as this is a potential concern for marine pollution and invasive species.
- Valued Components can be weighted for importance, but confidence in the results of analyses for broad issues that are difficult to measure may be low.

Possible ways to improve the list of Valued Components include:

- Some items in the draft list of Valued Components may require breaking down; others could be lumped into groups. For example, split recreational and commercial marine transport and safety and lump terrestrial wildlife and species at risk.
- Include public safety: evacuation and emergency response.
- Include foreshore erosion resulting from tanker wake.
- Climate change may not be appropriate for list.
- "Sustainable economy" is an ambiguous item.
- Consider "Dark Sky Friendly" lighting to limit light pollution under recreational or heritage impacts.
- The list of Valued Components might be improved by comparison to the factors considered in a comprehensive environmental assessment document.
- It would be worthwhile to consult professionals in the field of cumulative environmental effects to develop and expand the list of Valued Components.

Recommendation No. 7: - Woodfibre LNG – Environmental Assessment Valued Components Consultation

- **That the Valued Components list is developed via a more systematic process that includes professionals in the field of resource and environmental management (specifically, cumulative effects analyses)**

West Howe Sound (Area F) Advisory Planning Commission
June 24, 2014
Minutes of the meeting at Eric Cardinall Hall,
Shirley Macey Park, West Howe Sound, BC

(NOTE: The Area F APC minutes were received by the SCRD Board at the July 24, 2014 Board Meeting (Resolution 424/14 – Recommendation No. 38)

5.1 Woodfibre LNG – Environmental Assessment Valued Components Consultation

Concerns expressed by APC members regarding the Woodfibre LNG Environmental Assessment Valued Components (VCs) Consultation centered around: public health and safety and potential impacts of the project within West Howe Sound; and the nature of the consultation process including the proponent's lack of consultation on the Sunshine Coast and the lack of transparency of the process.

Points from the APC's discussion on the Environmental Assessment Valued Components documentation (June 2014) prepared by Woodfibre LNG for the BC Environmental Assessment process include:

- I don't see anything about monitoring to ensure things are being done.
- I am flabbergasted that they have changed the rules of the game, and said that we will no longer have a consultation in Gibsons.
- I am getting frustrated with having all this material to read, and we won't see the result of the AIR to see if our input was included.
- They are parceling it up, not talking about the cumulative effect.
- There is a potential enormous impact for Area F. Many of those VCs impact the West Howe Sound area, as shown on these maps:
 - 4-1 Atmospheric Environment Assessment Areas
 - 4-2 Atmospheric Sound, Light, Geomorphology and Natural Hazards, and Site Contamination Assessment Areas
 - 4-3 Surface Water Quality, Surface Water Quantity, and Marine Water Quality Assessment Areas
 - 4-5 Freshwater Fish and Fish Habitat, Marine Benthic Habitat, Marine Birds, Forage Fish and Other Fish, and Marine Mammals Assessment Areas
 - 4-7 Commercial Marine Use, Local Government Finances, Housing and Accommodation, Community Infrastructure and Services, Community Health and Wellbeing, and Emergency Services Assessment Areas
 - 4-9 Heritage Resources and Public Health Assessment Areas.

West Howe Sound is included in every one of these maps but we haven't been consulted. Because of this potential impact on our area it is imperative that we be consulted.

- Send a letter of protest. The EAO has said there is no public review. It is outrageous that the EAO has removed the requirement for the public review of the AIR. Outraged with being excluded.
- They are trying to fast track it. They want an LNG up and operating now.
- What was the rationale for removing the public consultation process? I think it is very shady.
- I have seen these projects get approved. The capital costs get passed on down. Will that create issues for supply for us? When will Fortis deliver on their commitment to harmonize rates with the Fraser Valley? I am worried because of this capital project; they will go to the Utilities Commission saying they can't afford it.
- We support (Senior Planner) David Rafael's concerns.
- In the section on Public Health on page 22 (in the "Updated Project Description" document), those are major health hazards and I don't think they are being addressed appropriately. They are going to pollute the environment. They are not giving enough serious consideration to the potential public health hazard.
- If Whistler was deemed important enough to be consulted, when there is no impact other than visual when they drive by, why were we excluded?

Agricultural Advisory Committee

July 22, 2014, 3:30 pm

Minutes of the meeting held in the Cedar Room of the Sunshine Coast
Regional District Offices, 1975 Field Road, Sechelt, BC

(NOTE: The SCRD Board has not yet received the minutes from this meeting of the Agricultural Advisory Committee, this will take place at a Board meeting in September)

4.3 Proposed LNG Project as it relates to Agriculture

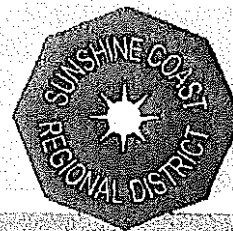
Discussion transpired on the proposal to transport liquefied natural gas (LNG) from Squamish through Howe Sound. Concerns about potential impacts of air quality on regional agriculture and about safety risks were raised. Staff reported the SCRD Planning and Development Committee recently recommended that a letter be sent to the federal government requesting that tanker traffic in Howe Sound be banned. In addition, that comments submitted by staff to the BC Environmental Assessment Office would include reference to agriculture concerns.

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May 29, 2014

Josh Handysides, Project Assessment Manager
Woodfibre LNG Project
BC Environmental Assessment Office
PO Box 9426 Stn Prov Govt
Victoria BC V8W 9V1
josh.handysides@gov.bc.ca

SENT VIA EMAIL

Dear Mr. Handysides:

RE: SCRD comments regarding the draft Application Information Requirements (dAIR) for the proposed Woodfibre LNG Project

At its regular meeting on May 22, 2014, the Sunshine Coast Regional District Board considered the draft Application Information Requirement (dAIR) for the proposed Woodfibre LNG project and the following resolution was adopted:

302/14 Recommendation No. 17 Woodfibre Liquid Natural Gas (LNG) – Environmental Assessment Working Group

THAT the Senior Planner's report titled "Woodfibre LNG – Environmental Assessment Working Group" be received;

AND THAT the Sunshine Coast Regional District (SCRD) Board forward the following comments to the BC Environmental Assessment Office for inclusion in the draft Application Information Requirements (AIR);

a) The list of Projects/Activities for Cumulative Effects Assessment needs to include specific activities from existing establishments such as Camp Potlatch for consideration;

b) Reference should be made to the proposed Provincial process known as Cumulative Effects Assessment Framework for Howe Sound and potential increase in emissions from alteration to Port Mellon compressor station should be identified for consideration;

c) Sustainable Economy Valued Components (VC):

(i) There may be impacts/benefits for SCRD, Town of Gibsons and Islands Trust areas. Thus the draft AIR should make reference to SCRD and Islands Trust. Reference is made to the Howe Sound area being the regional area for the marine portion under the economy heading. This should be amended to

refer to the SCRD, Islands Trust (Gambier Island Local Trust specifically) and Town of Gibsons;

(ii) Commercial marine use is a significant sub-component and impacts on SCRD area (specific reference to Hillside Industrial area), Gambier Island Local Trust and the Town of Gibsons as areas that should also be noted for consideration/study;

(iii) There may be scope for other locations to provide workforce and other ports/docks could be used for worker/material transport. The draft AIR should include reference to considering/reviewing additional locations;

d) Marine Transport Valued Components:

The marine transport component notes the marine transport route. These are shared by vessels (commercial and recreational) that access the SCRD, Gambier Island Local Trust and Town of Gibsons. Thus the draft AIR should specifically refer to considering, gathering information about and identifying potential impacts on these areas. As with the Sustainable Economy VC, reference is made to Howe Sound area and this section could specifically reference the SCRD, Gambier Island Local Trust and Town of Gibsons areas;

e) Full range of potential impact of wake from Liquid Natural Gas (LNG) tankers on shoreline should be investigated in addition to potential heritage/archaeology impacts;

f) Public Meetings

During each public consultation period, a public meeting should be arranged in the Gibsons area;

g) Additional comments may be provided by the SCRD during the public consultation period for the draft AIR;

h) Issues of Public Safety, for example being in an earthquake zone, be addressed;

AND THAT the Environmental Assessment Office be requested to provide additional communication regarding public information meetings that will be held in Gibsons and area.

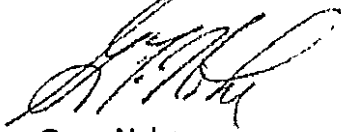
For your reference, the staff report titled "Woodfibre LNG – Environmental Assessment Working Group", dated May 13, 2014, is enclosed with this letter.

In addition to the SCRD comments on the dAIR as listed above, specific attention should be noted to the Board's request that the Environmental Assessment Office communicate with staff regarding future public information meetings held in Gibsons and area.

Should you have any questions regarding this matter, please contact David Rafael, Senior Planner, 604 885 6804 ext 4 or david.rafael@scrd.ca.

Yours truly,

SUNSHINE COAST REGIONAL DISTRICT



Garry Nohr
SCRD Chair

Enclosure:

Staff Report "Woodfibre LNG – Environmental Assessment Working Group", dated May 13, 2014

/ar

SCRD STAFF REPORT

DATE: May 13, 2014

TO: Corporate and Administrative Services – May 22, 2014

FROM: David Rafael, Senior Planner

RE: **WOODFIBRE LNG – ENVIRONMENTAL ASSESSMENT WORKING GROUP**

RECOMMENDATIONS

1. THAT the report dated May 13, 2014 and titled “Woodfibre LNG – Environmental Assessment Working Group” be received;

2. AND THAT the SCRD Board forward the following comments to the BC Environmental Assessment Office for inclusion in the draft Application Information Requirements (AIR):

a) The list of Projects/Activities for Cumulative Assessment needs to include specific activities such as Camp Potlatch for consideration and reference should be made to proposed cumulative effects assessment study for Howe Sound and potential increase in emissions from alteration to Port Mellon compressor station should be identified for consideration;

b) Sustainable Economy Valued Components (VC):

- (i) There may be impacts/benefits for SCRD, Town of Gibsons and Islands Trust areas. Thus the draft AIR should make reference to SCRD and Islands Trust. Reference is made to the Howe Sound area being the regional area for the marine portion under the economy heading. This could be amended to refer the SCRD, Islands Trust (Gambier Island Local Trust specifically) and Town of Gibsons;
- (ii) Commercial marine use is a significant sub-component and impacts on SCRD area (specific reference to Hillside Industrial area), Gambier Island Local Trust and the Town of Gibsons as areas that should also be noted for consideration/study;
- (iii) There may be scope for other locations to provide workforce and other ports/docks could be used for worker/material transport. The draft AIR should include reference to considering/reviewing additional locations;

c) Marine Transport Valued Components:

The marine transport component notes the marine transport route. These are shared by vessels (commercial and recreational) that access the SCRD, Gambier Islands Local Trust and Town of Gibsons. Thus the draft AIR should specifically refer to considering, gather information about and identifying potential impacts on these areas. As with the Sustainable Economy VC, reference is made to Howe Sound area and this section could specifically reference the SCRD, Gambier Islands Local Trust and Town of Gibsons areas;

d) Full range of potential impact of wake from LNG tankers on shoreline should be investigated in addition to potential heritage/archaeology impacts;

e) Public Meetings

During each public consultation period, a public meeting should be arranged in the Gibsons area;

f) Additional comments may be provided by the SCRD during the public consultation period for the draft AIR;

- 3. AND FINALLY THAT the recommendations be forwarded to the SCRD Board meeting of May 22, 2014 to allow for formal comments to be included by the June 2, 2014 deadline.**

BACKGROUND

The Woodfibre LNG project's environmental assessment (EA) is moving forward and the BC Environmental Assessment Office (EAO) has established a working group made up of representatives from local and senior governments and First Nations. SCRD staff attended a meeting was held on May 12, 2014 to consider a preliminary draft of the valued components report and the draft Application Information Requirements (AIR).

The draft documents are not available for public release at this stage as they are working drafts that will be amended based upon input from the working group. Once the drafts are amended and approved by the EAO a public consultation period will take place, normally for 30 days. This will focus on ensuring that the documents set out the full range of issues that the proponent needs to address in the application for the environmental certificate.

The SCRD will have an additional opportunity to provide feedback during the public consultation period and referrals can be made to the Area F Advisory Planning Commission (APC), Natural Resources Advisory Committee (NRAC), Hillside Industrial Park Owners and Tenants Association (HIPOTA), Town of Gibsons and Islands Trust.

The proponent and EAO have held discussions with and referred the preliminary drafts to First Nations, including the Squamish Nation. These draft AIR specifically refers to First Nation engagement.

After the public consultation period the proponent will need to review comments and either make changes to the documents or explain why no changes are needed. The EAO will then review the next draft and, if satisfied, approve it or direct the draft to be amended prior to approval. The proponent will then complete the required studies and gather required information and submit it to the EAO for review. The working group and public will have an opportunity to check that the AIR terms were met (test for completeness) and then a public review of the contents of the studies, information, conclusions will take place.

Again the proponent will have an opportunity to review and respond to comments received and if need additional information/studies may be required (possibly with additional public review). Once the EAO is satisfied the information is complete reports will be drafted by both the EAO and Canadian Environmental Assessment Agency staff for consideration by the respective provincial and Federal Ministers. The Ministers will review the reports and then make their decisions as to whether the environmental certificate is to be issued. Conditions may be attached to this decision. If the certificate is issued then the proponent needs to receive all permits required by the governments (such as building permits and provincial lease).

DISCUSSION

Valued Components (preliminary draft)

The draft notes that:

"Valued Components (VCs) are the basis of the environmental assessment (EA) framework used by the EAO. Their careful selection in a project promotes a comprehensive assessment of potential effects that are focused, understandable and accessible while making the most effective and efficient use of resources."

And further that:

"The selected VCs determine what will be assessed in the EA and inform baseline data collection and analysis. The selection of VCs considers the five pillars recommended by EAO for the EA including: environmental, economic, social, heritage, and health."

They are identified through review of available information about the area (e.g. literature, other studies/EAs) and preliminary consultation (including with First Nations, technical specialists and governments).

Each VC will identify sub components and indicators.

A list of potential VCs is drawn and then each is evaluated as to whether to include it in the final list. The following filters are used:

- **Regulatory importance** – regulatory requirements. Agency input for VC selection is ongoing, and additional input is anticipated during the pre-Application phase;
- **Aboriginal group considerations** – anticipated Aboriginal group interest. Aboriginal group input is ongoing and is not necessarily available to inform identification of the candidate VCs at this time;
- **Conservation or scientific importance** – species and guild identification in federal or provincial databases or legislation; or
- **Significance to other stakeholders, including local government** – based on professional experience and expressed through consultation programs.

The objective is to establish baselines against which the project effects can be measured, mitigation can be developed, significance of effects are determined and mitigation/compliance can be evaluated.

The draft list of VCs is:

- Air quality
- Climate change/greenhouse gas
- Vegetation
- Birds (including marine birds)
- Amphibians
- At risk bats
- Grizzly Bear
- Fish/fish habitat (including forage fish)
- Marine habitat
- Marine mammals
- Labour market
- Sustainable economy
- Infrastructure/community services
- Marine transport
- Land and resource use
- Visual quality

- Heritage resources
- Public health

Each of the above include additional detail. For example specific species such as Marbled Murrelet, are identified.

The draft also identifies Intermediate Components (IC) that will contribute to analysis of the VCs and this list is:

- Atmospheric sound
- Light
- Geomorphology/natural hazards
- Site contamination
- Surface water quality/quantity
- Marine water quality

SCRD staff consider that this is a comprehensive list of VC and IC and there are no obvious gaps.

Application Information Requirement (preliminary draft)

The draft AIR outlines what will be included in the application for the environmental certificate. The AIR does not include much data or analysis; it is mainly a set of headings that establish what the application will include. The following section headings are set out:

- Description of the EA process
- Project details (location, history, description, required permits and benefits)
- Alternative means of conducting the project
- Consultation (pre-application and that planned during the application review, including with First Nations
- Assessment of potential effects (including cumulative), mitigation, significant residual effects
- List of VC and intermediate components (setting out rationale for inclusion)
- Spatial (local, regional study areas for each component) and temporal (construction, operation, decommissioning phases) boundaries
- List of current and proposed project/activities in the area includes Box Canyon IPP, Burnco Aggregates, McNair Creek IPP, Rainy River IPP, Aquilini Renewable Energy (Port Mellon Incinerator), BC Ferries, recreational boating, back country recreation. Staff note specific activities such as Camp Potlatch Boys and Girls Club camp should be added for consideration of cumulative effects. Reference should also be added to the proposed cumulative effects study for Howe Sound. Another aspect that should be considered is the potential impact of changes to the Port Mellon compressor station; while the new compressor is smaller, it is likely to be operated more frequently. Thus there may be an increase in emissions.

Each IC and VC will have its own section that will include most of the following headings:

- description of the component
- scoping and rationale
- spatial/temporal boundaries (where and during which phase will might there be impacts/studies)
- existing conditions
- potential impacts/interactions
- proposed mitigation
- study results
- proposed studies

- cumulative effects assessment
- conclusions

Sustainable Economy VC

Under the sustainable economic component, the draft does not identify the SCRD within the local or regional assessment areas. While the main economic impacts are likely to be felt within the District of Squamish and Squamish Lillooet Regional District, there may be impacts/benefits for SCRD and Islands Trust (specifically the Gambier Island Local Trust) areas. Thus the draft AIR should make reference to SCRD and Islands Trust. Reference is made to the Howe Sound area being the regional area for the marine portion under the economy heading; this could be amended to refer the SCRD and Islands Trust.

Commercial marine use is a significant sub-component and staff consider that impacts on Hillside, Gambier/Keats Islands and the Town of Gibsons should also be noted for consideration/study.

In the project description published in December 2013, the proponent noted that the workforce would be transported from the District of Squamish. Thus it is likely employment and economic spin-off would be focused in that area. Staff consider that there may be scope for other locations to provide workforce and other ports/docks could be used for worker/material transport. The draft AIR should include reference to considering/reviewing additional locations.

Marine Transport VC

The marine transport component notes the marine transport route. These are shared by vessels (commercial and recreational) that access the SCRD, Islands Trust and Town of Gibsons. Thus the draft AIR should specifically refer to the SCRD (with emphasis on Hillside area), Islands Trust, and Town of Gibsons as areas to consider, gather information about and identify potential impacts. As with the Sustainable Economy VC, reference is made to Howe Sound area and this could be expanded to identify the SCRD, Islands Trust and Town of Gibsons.

Wake from Tankers

The tanker route will primarily pass east of Anvil, Gambier and Bowen Islands and exit from the Sound via the Queen Charlotte Channel between Bowen and West Vancouver/Horseshoe Bay. An alternative exit is through the Collingwood Channel between Bowen and Keats Islands.

The tankers will produce wake and the draft AIR refers to investigating impact with respect to heritage sites on the shore along the route. There may be other impacts to the shoreline, such as geotechnical and to existing docks. Thus the draft AIR should refer to this and the need to gather additional information about potential impacts.

Public Meeting

SCRD staff will confirm if the draft AIR public consultation period will include public meetings. If so then the EAO will be requested to arrange one meeting within the Gibsons area. The draft AIR could note that during each public consultation period, if public meetings are required, then one should be held in the Gibsons area.

Working Group Meeting

Staff provided initial feedback based on the comments set out in this report and noted that the SCRD Board may provide a formal response by the June 2, 2014 deadline. It was also noted that the SCRD Board may provide additional comments during the public consultation period as this will allow for input from consultative bodies such as the Area F APC, NRAC and HIPOTA. The EAO was also requested to ensure that separate referrals are sent to the Town of Gibsons and the Islands Trust.

Draft SCRD Comments

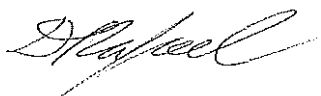
Staff consider that the following comments could be sent by the SCRD Board to the EAO regarding the preliminary draft Application Information Requirements:

- a) The list of Projects/Activities for Cumulative Assessment needs to include specific activities such as Camp Potlatch for consideration and reference should be made to proposed cumulative effects assessment study for Howe Sound and potential increase in emissions from alteration to Port Mellon compressor station should be identified for consideration;
- b) Sustainable Economy Valued Components (VC):
 - (i) There may be impacts/benefits for SCRD, Town of Gibsons and Islands Trust areas. Thus the draft AIR should make reference to SCRD and Islands Trust. Reference is made to the Howe Sound area being the regional area for the marine portion under the economy heading. This could be amended to refer the SCRD, Islands Trust (Gambier Island Local Trust specifically) and Town of Gibsons;
 - (ii) Commercial marine use is a significant sub-component and impacts on SCRD area (specific reference to Hillside Industrial area), Gambier Island Local Trust and the Town of Gibsons as areas that should also be noted for consideration/study;
 - (iii) There may be scope for other locations to provide workforce and other ports/docks could be used for worker/material transport. The draft AIR should include reference to considering/reviewing additional locations;
- c) Marine Transport Valued Components:

The marine transport component notes the marine transport route. These are shared by vessels (commercial and recreational) that access the SCRD, Gambier Islands Local Trust and Town of Gibsons. Thus the draft AIR should specifically refer to considering, gather information about and identifying potential impacts on these areas. As with the Sustainable Economy VC, reference is made to Howe Sound area and this section could specifically reference the SCRD, Gambier Islands Local Trust and Town of Gibsons areas;
- d) Full range of potential impact of wake from LNG tankers on shoreline should be investigated in addition to potential heritage/archaeology impacts;
- e) Public Meetings

During each public consultation period, a public meeting should be arranged in the Gibsons area;
- f) Additional comments may be provided by the SCRD during the public consultation period for the draft AIR;

In order to meet the June 2, 2014 deadline for comments from the working group, the recommendations need to be considered at the May 22, 2014 Board meeting. The public consultation period for the draft AIR is likely to take place this summer.



David Rafael, Senior Planner

FILE COPY

Mayall, Jane EAO:EX

From: Smith, Alanya C EAO:EX
Sent: Tuesday, July 22, 2014 3:41 PM
To: Paulson, Amber EAO:EX; 'Byng Giraud'; 'Amanda Zinter'
Cc: Mayall, Jane EAO:EX
Subject: 30050-20/WLNG-05-06 unable to print attachment RE: Draft
Agenda - July 23 meeting

Hello,

I've attached a draft schedule outlining the key next steps to finalize the AIR for discussion at our meeting tomorrow.

Please let us know if there are other items besides those listed below that you would like to discuss.

Thank you,

Alanya Smith |Project Assessment Manager| Environmental Assessment Office | Tel: (250) 387-2406 | BB: 21's
21's | Fax: (250) 387-2208



From: Paulson, Amber EAO:EX
Sent: Monday, July 21, 2014 2:02 PM
To: 'Byng Giraud'; 'Amanda Zinter'
Cc: Smith, Alanya C EAO:EX; Mayall, Jane EAO:EX
Subject: Draft Agenda - July 23 meeting

Hi Byng/Amanda:

Here is a proposed agenda for our two hour in-person meeting this Wednesday. Please have a look and see if you would like any changes/ additions.

Objective: Discuss timelines and deliverables involved with finalization of the AIR.

Meeting Agenda:

1. Project Schedule
2. Next steps towards finalizing the AIR

a. Outstanding Issues.

- i. Site contamination
- ii. Groundwater
- iii. Bird species at risk – Great Blue Heron & Marbled Murrelet

b. Final tracking table and new dAIR for distribution

3. First Nation Consultation

- a. Aboriginal Consultation Plan/Report
- b. Update – Squamish Nation

4. Public Comments – responses and process

Thanks,

Amber Paulson

Project Assessment Officer
Environmental Assessment Office
Tel: 250.387.2413 BB: 21'S
www.eao.gov.bc.ca

draft AIR Finalization Work Plan (dates subject to change)

Created by Amber Pauison

DRAFT PROJECT SCHEDULE - Woodfibre LNG

Enter Project Name: Woodfibre LNG

Today's Date:

2014-07-24 Last Date Updated:
(Target 65)

2014-07-24

Phase	Task/Deliverable	Responsibility	CEAA Clock	Notes	Start	End	Status
AIR	Public Comment Period	EAO	38-83	VC Selection et al.	12-Jun	27-Jul	In Progress
AIR	dAIR/VC FN comment TT w/ draft responses	WLNG			24-Jun	24-Jun	Complete
AIR	dAIR/VC WG comment TT w/ draft responses	WLNG			26-Jun	26-Jun	Complete
AIR	Guidance on dAIR/VC FN Comment TT	EAO		Call 02-Jun	27-Jun	27-Jun	Complete
AIR	Guidance on dAIR/VC WG Comment TT	EAO		Email July 15	14-Jul	15-Jul	Complete
AIR	dAIR/VC FN comment TT - Final responses	WLNG		2 weeks	27-Jun	16-Jul	Complete
AIR	dAIR/VC WG comment TT - Final responses	WLNG		1 week	16-Jul	28-Jul	
AIR	Draft #2 AIR - incorporating EAO/WG/FN/public feedback	WLNG			28-Jul	28-Jul	
AIR	WG/FN review of Draft #2 AIR and response TT	EAO		2 weeks	28-Jul	11-Aug	
FN	Aboriginal Consultation Plan	WLNG		Reasonable review period by FNs prior to submission to EAO	01-Sep	01-Sep	
FN	Aboriginal Consultation Report #1	WLNG		within 30 days of deadline for Aboriginal Group Comments on dAIR (August 11)	10-Sep	10-Sep	
AIR - PCP	Responses to Public Comments	WLNG		2 weeks after close of PCP	27-Jul	11-Aug	
AIR - PCP	EAO review public comments and responses	EAO		2 week to review - post with final AIR	11-Aug	22-Aug	
AIR - PCP	Public comment report #1	WLNG		30 days w/in close of PCP (July 27)	27-Aug	27-Aug	
AIR	dAIR #2 FN/WG comment TT w/ responses/ proposed changes to AIR (draft #3) in consideration of FN/WG/ Public Comments	WLNG		10 days	12-Aug	22-Aug	
AIR	EAO/WLNG Working Meeting on TT responses - tentative	WLNG/EAO		1 day	20-Aug	20-Aug	
AIR	EAO review TT responses and draft #3	EAO		10 days	23-Aug	04-Sep	
AIR	Meeting with WLNG to discuss 'final' AIR	EAO			05-Sep	05-Sep	
AIR	Submit formal request for AIR approval	WLNG		Note: this triggers CEAA clock	08-Sep	08-Sep	
AIR	Issuance of AIR	EAO	84		09-Sep	09-Sep	

Mayall, Jane EAO:EX

From: Smith, Alanya C EAO:EX
Sent: Monday, July 21, 2014 4:40 PM
To: Lara Taylor (ltaylor@hemmera.com); 'Amanda Zinter'
Cc: Paulson, Amber EAO:EX; Mayall, Jane EAO:EX
Subject: 30050-20/WLNG-05-06 FW: Woodfibre LNG - HC guidance

FYI – some relevant material related to assessing impacts to Human Health. Please review and consider referencing in the draft AIR if you haven't already.

Thank you,
Alanya

Alanya Smith |Project Assessment Manager| Environmental Assessment Office | Tel: (250) 387-2406 | BB: 21's
21's | Fax: (250) 387-2208

From: Yota Hatziantoniou [mailto:yota.hatziantoniou@hc-sc.gc.ca]
Sent: Monday, July 21, 2014 3:22 PM
To: Smith, Alanya C EAO:EX
Subject: Re: Woodfibre LNG - HC guidance

Hi Alanya,

For our Contaminated Site Division's latest guidance on HHRA, you can email cs-sc@hc-sc.gc.ca, and request the following suggested docs:

- Federal Contaminated Site Risk Assessment in Canada, Part I: Guidance on Human Health Preliminary Quantitative Risk Assessment
- Part V: Guidance on Human Health Detailed Quantitative Risk Assessment for Chemicals (DQRACHEM)
- Federal Contaminated Site Risk Assessment in Canada: Supplemental Guidance on Human Health Risk Assessment for Country Foods (HHRA_{Foods})

A description of these and other guidance documents may be found by following this link: <http://www.hc-sc.gc.ca/ewh-semt/contam/site/docs/index-eng.php#a1>

Also, here's the link to our general EA guidance doc "Useful Information for Environmental Assessments": http://www.hc-sc.gc.ca/ewh-semt/pubs/eval/environ_assess-eval/index-eng.php

Sincerely,
Yota

Yota Hatziantoniou, BSc, MSc (Plan)

Regional Environmental Assessment Coordinator
Health Canada / Government of Canada
yota.hatziantoniou@hc-sc.gc.ca / Tel: 604-666-5720

Coordonnatrice régional de l'évaluation environnementale
Santé Canada / Gouvernement du Canada
yota.hatziantoniou@hc-sc.gc.ca / Tél: 604-666-5720

Mayall, Jane EAO:EX

From: Smith, Alanya C EAO:EX
Sent: Tuesday, July 15, 2014 9:52 PM
To: 'byng_giraud@wlng.ca'; 'Amanda_Zinter@wlng.ca'
Cc: Paulson, Amber EAO:EX; Mayall, Jane EAO:EX; 'ltaylor@hemmera.com'
Subject: 30050-20/WLNG-05-06 Woodfibre LNG - tracking table/ dAIR
Attachments: Copy of 140625_WoodfibreLNG_WG_TrackingTable- AP.xlsx

Hello,

Please find attached the Working Group tracking table with EAO's comments. Most comments are requests for clarifications or to incorporate a specific change into the dAIR. I have also summarized below a few of the key topics for further follow-up that have emerged from Working Group and First Nations feedback on the first draft of the proposed Woodfibre LNG draft AIR.

Site Contamination IC – The Application must include study of potential contaminants of concern due to the industrial history of the site. It is unclear that Site Contamination would be appropriate as an IC. The information about site contamination needs to be considered as it relates to the context/ baseline data for soils and sediment and water quality. Please consider the following:

- The Application should include a description of site history, site contamination (identifying contaminants of concern) and certificate of compliance as context.
- Suggest renaming the "Site Contamination (IC)" to "Soils and Sediment (IC)"
 - The Soil and Sediment IC would include assessment of 1) terrestrial soils and 2) marine sediments.
 - Describe how the Soils and Sediment IC is expected to interact with other ICs/ VCs such as surface water quality and marine water quality, groundwater quality, and Human Health (provide pathway of effects to identify linkages)
 - Include baseline of the contaminants of concern under the existing conditions sub-heading
 - Compare existing baseline conditions to accepted guidelines and thresholds where available (e.g. water quality guidelines)
 - Describe the potential interaction of the Project activities with contaminants of concern (e.g. the potential mobilization of contaminants from disruption of soils during construction) and identify the potential effects for each IC/VC identified on the effects pathway with the Soils and Sediment IC.

Clarification of Effects Pathways and Linkages between ICs and VCs – Working Group members have expressed some confusion about the relationship between ICs and VCs and concerns about understanding what data/information will be provided for each IC and VC. Please consider the following:

- Include pathway of effects diagrams;
- Use consistent language indicating linkages in the dAIR (see tracking table for more guidance);
- Identify in the AIR what technical data reports will be provided with the Application (in appendices) to support the review of ICs and VCs by technical working group members (see tracking table for more guidance).

Species at risk – Further discussion is required with FLNRO and CWS to determine which species at risk need to be assessed (i.e., spotted owl, northern goshawk, marbled murrelet and great blue heron). Please provide a rationale explaining which species at risk would be included in the assessment and which would not.

Groundwater IC - Please provide a rationale for whether groundwater should be included as an IC or not. In your rationale describe potential project effects and interactions with any receptor VCs or ICs that may interact with groundwater.

I understand that Lara and Amber will be going through each line of the table tomorrow and will raise any outstanding questions that we need to discuss further.

Please let us know when you think the next version of the dAIR and comment tracking table will be ready to provide to the Working Group and First Nations for a final review. I expect to provide it for about a 2 week review since it will be the second opportunity to provide comments. At our meeting next week we can discuss the potential timing and next steps for finalizing the AIR.

If there are any questions about our comments, Amber and I are available to discuss.

Thank you,
Alanya

Alanya Smith |Project Assessment Manager| Environmental Assessment Office | Tel: (250) 387-2406 | BB: 21's
21's | Fax: (250) 387-2208

Comment ID#	Date Submitted	Submitter name and title	Agency/AFN/Location	Comment relevant to Draft VC Selection or dAIR?	Relevant section and page number	Comment/Issue Description/Suggested Changes	Category/Theme	Change to the Draft VC Selection or dAIR required?	Application Government/Local government/Permitting/Requirement?	Proponent's Response	EAO's Assessment of Response	Proponent's Follow-up Response/Action
2	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	2.2.5- P10	There are no buildings identified to support fire fighting / rescue / training services during the construction phase. Will this be addressed?	Project Description	No	Permitting Requirement Local government	Project-specific emergency services during construction and operation, and additional information regarding facilities and training will be included in the EAC application and in the Fire Hazard and Abatement Management Plan to be included as part of the Construction Environmental Management Plan. The supporting infrastructure for emergency services, including equipment and water requirements, will be addressed prior to the start of construction. The Project will be self-sufficient in terms of emergency response during operations. Potential effects to existing emergency services will be considered as a subcomponent of the "Community and Infrastructure Services" VC.	Unresolved - reference page 148, list of EMPs, including fire hazard and abatement plan. More detail on "the supporting infrastructure for emergency services, including equipment and water requirements, will be addressed prior to the start of construction" - if this is a requirement of a permit/bylaw indicate the responsible authority and the name of the permit/bylaw. How will it be addressed?	
2	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	2.2.5- P11	Supporting infrastructure - would the proponent expand on the types of safety facilities and the types of structures? Will they have the ability to be self-supportive in the event of an earthquake for an extended period of time?	Project Description	No	Permitting Requirement Local government	Please see the response to Comment #1. WVNG would be pleased to meet directly with the Squamish Fire Department to discuss further.	Unresolved - please indicated that WVNG has met with the Squamish Fire Department and will continue to consult with them re: the emergency response plans.	
3	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	2.2.6.1- P12	Will there be a hydrant system developed on site with engineered water flows to support firefighting and fire suppression operations?	Project Description	No	Permitting Requirement Local government and CSA	The hydrant system requirements will be assessed and developed to be Project-specific during the permitting process.	Unresolved - provide details of permitting process, as request above - name of permit/bylaw and responsible agency.	
4	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	dAIR	2.2.6.1- p13	Will the ferry system/barge be capable of transporting vehicles up to 35,000kg and 13 meters in length if required?	Project Description	No	Permitting Requirement Local government	Please see response to Comment #1.	Unresolved - the response does not specifically address the comment, is the comment related to the transportation of emergency response vehicle/fire truck via barge to the site? Unresolved - please indicated that WVNG has met with the Squamish Fire Department and will continue to consult with them re: the emergency response plans.	
5	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District (SCRD)	dAIR		b) Reference should be made to the proposed Provincial process known as Cumulative Effects Assessment Framework for Howe Sound and potential increase in emissions from alteration to Port Mellon compressor station should be identified for consideration;	Environmental Assessment Methods	Yes		The EA will include a Project-related cumulative effects assessment according to provincial and federal guidelines, in which other projects that may interact cumulatively with Project-related residual effects will be considered. The Eagle Mountain Gas Pipeline Project (in which the upgrade to the Port Mellon compressor station are being considered) was inadvertently omitted from Table 4-5 in the dAIR, and has now been included. We understand that there are ongoing discussions within the province regarding a Cumulative Effects Framework for Howe Sound; however, it is not in place at this time.	Resolved to EAO's satisfaction. EAO has followed up with Project Coordinator at MFLNRD for a status update on the Cumulative Effects Framework for Howe Sound on July 10, 2014. This framework is only in the preliminary stages of development and the province has not yet made a decision on whether to apply to framework for a regional-area assessment of cumulative effects for Howe Sound. Furthermore, the Cumulative Effects Assessment framework for Howe Sound is not applicable for project-based assessments as it plays a much broader focus to cumulative effects. Resolved to EAO's satisfaction - The Eagle Mountain Gas Pipeline is now included in Table 4-5.	

Comment ID	Date Submitted	Submitter Name and Title	Agency/AMN	Comment relevant to draft VC selection or dAIR?	Relevant section and page number	Comment/Issue Description/Suggested Changes	Category/Theme	Change to the draft VC selection/dAIR Required?	Application Review and/or Permitting Requirement?	Proponent's Response	EAO's Assessment of Response	Proponent's Follow-up Response/Action
6	2-Jun-14	Kellie Leecham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 39, Section 4.5	The Port Mellon Pulp mill should be included in the assessment as an existing and future source that may interact and/or affect the project.	Environmental Assessment Methods	Yes		Table 4-3 in the dAIR has been edited to include the Port Mellon Pulp Mill. We note that the existing facilities are considered to be reflected in the existing conditions descriptions for each ICVC. The cumulative effects assessment will consider proposed reasonably foreseeable future projects with sufficient information.	Unresolved - From the EAO VC selection guide: "In BC, the assessment of cumulative effects for renewable projects should consider other past, present, and reasonably foreseeable projects and activities, which is consistent with evolving best practice and the federal approach under the Canadian Environmental Assessment Act, 2012." This is correctly referenced in the dAIR (Section 4.5). Please correct the response as cumulative effects assessment should include other past, present and reasonably foreseeable future projects, even if existing facilities are considered to be reflected in the existing conditions descriptions for each ICVC. Resolved to EAO's satisfaction - Howe Sound Pulp and Paper Corporation has been added to Table 4-3.	
7	30-May-14	SCRO (David Raftel, Senior Planner)	Sunshine Coast Regional District (SCRD)	dAIR		a) The list of Projects/Activities for Cumulative Effects Assessment needs to include specific activities from existing establishments such as Camp Potlatch for consideration.	Environmental Assessment Methods	No		Existing recreational marine activities are addressed in the existing conditions section as a component of the Marine Outdoor Recreation sub-component in the Land and Resource Use VC (Section 7.4). Marine activities undertaken at Camp Potlatch such as kayaking and canoeing will be included in this section.	Resolved to EAO's satisfaction	
8	2-Jun-14	Kellie Leecham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 39	Cumulative effects will be assessed for each assessment discipline where the residual effects from the Project could interact spatially and temporally with the same residual effects from other identified Projects. This statement seems to define the scope too narrowly; effects on VCs may be substantial despite not being the same mechanism. Propose leaving "same" out. IF	Environmental Assessment Methods	Yes No	Application Review	If the residual effect is the same, regardless of the mechanism, it will be considered in the cumulative effects assessment. For example, if there is a residual effect to water quality (e.g., turbidity) from logging activities, and a residual effect to turbidity from Project construction activities, the cumulative effect will be considered.	Unresolved - please refer to the EAO VC selection guide, for additional information on the requirement/need for cumulative effects assessment: "It is necessary to evaluate predicted residual effects of the reviewable project to determine whether any cumulative interaction with the residual effects of other projects and activities is considered likely to occur." Required update section 4.5.1 of the dAIR to conform to the above statement: "Cumulative effects will be assessed for each assessment discipline VC and/or sub-component in which the predicted residual effects from the Project are likely to interact spatially and temporally with the same residual effects from other identified Projects". Consider adding the following text from the VC selection guideline to provide further clarity: When determining the requirement to conduct a cumulative effects assessment the following questions will be considered: • Would the residual effect of the project result in a measurable change in the cumulative effect? If not, a detailed cumulative effects assessment may not be warranted. • Would the residual effect of the project substantially change the characteristics of the cumulative effect? (e.g., substantial increase in magnitude, extent, duration, or frequency)? If not, a detailed cumulative effects assessment may not be warranted. • Is the VC already significantly adversely affected by other projects and activities? If so, a detailed cumulative effects assessment may be warranted. • Is the VC so sensitive to additional disturbance that even a small incremental adverse effect may be sufficient to cause a significant adverse cumulative effect? If so, a detailed cumulative effects assessment may be warranted."	
9	7-May-14	James Davies, Regional Hydrologist	Ministry of Forests, Lands and Natural Resource Operations (MFLNRO) - South Coast - Authorization	dAIR	2.7, page 19	Concurrent Permitting The 2013 Project Description, page 69 has: WNLG anticipates applying for concurrent permitting, under BC's Concurrent Approval Regulation, for the following provincial permits and licences: LNG Facility Permit (BC Oil and Gas Activities Act); Water Licence (BC Water Act); and Waste Discharge Permits (BC Environmental Management Act). While the May 5, 2014, version 2.0, page 19, dAIR has: The Proponent does not anticipate applying for concurrent permitting, under BC's Concurrent Approval Regulation (BC Reg. 373/2002). The Proponent is pursuing synchronized permitting with the BC Oil and Gas Commission (OGC). Noted for change in permitting process.	Applicable Permits	No	Permitting Requirement OGC	WNLG acknowledges the comment and confirms that synchronized permitting with the OGC will be pursued.	Resolved to EAO's satisfaction	

Comment ID	Date Submitted	Submitter Name and Title	Agency/Authority	Comment Ref. to Draft VC Selection or dAIR?	Relevant Section and Page Number	Comment/Issue Description/Requested Change	Category/Theme	Change to the Draft VC Selection/dAIR Requested?	Application Review, Permitting Requirement OGC and Worksafe BC	Proposed Response	EAO's Assessment of Response	Proposed Follow-up Response/Action
10	25-May-14	Yota Hatzilantoniou, Regional Environmental Assessment Coordinator	Health Canada (HC)	dAIR	Table 5-1 (pg. 46)	With respect to assessing low frequency noise (vibration), HC suggests that the Proponent reference guidance from the American National Standards Institute (ANSI), 2005.	Atmospheric Sound	Yes	Application Review, Permitting Requirement OGC and Worksafe BC		Unresolved - please follow-up with Health Canada for necessary changes to the dAIR to include the assessment of low frequency noise (vibration) and the required methodologies.	
11	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	dAIR	5.5.4.3, Table 5.3 S12, S13	<p>Potential changes to baseline environment. Incidentally identifies 'forest fire' as a potential impact from Climate Change. This and a bullet in Section 12 'Effects of the Environment on the Project' seem to be the only recognition of this risk. 5.13 includes fire hazard and abatement as a proposed environmental management plan</p> <p>The proposed development area is surrounded by upland second growth forests which may pose a wildfire risk to infrastructure and human life and safety during periods of low precipitation and summer high heat conditions. Proponent should recognise this risk and provide recommendations for fuel treatments to protect investment and to mitigate impacts to other values, such as surrounding forest values, air quality. BC FireSmart guidelines are available for reference.</p> <p>"Forest Fire" as a subject may be more appropriately described in Section 7.6, as "wildfire" is linked to Land and Resource Use (controlled burns may be used as a tool for ecosystem restoration e.g. prescribed fire) and is managed in FLNR jurisdiction at the Sea to Sky District level. Where it is required (if supported by a more detailed assessment), identify whether/how much Crown forests may be impacted/cleared.</p> <p>In the development of an EMP for "Fire hazard and Abatement", proponent should consult with Sea to Sky Natural Resource District (Land & Resource Specialist, Protection Officer) to ensure expectations are clear, achievable, and supported by the regional fire centre who would respond in event of wildfire.</p>	Geomorphology and Natural Hazards (also Land and Resource Use)	Yes		<p>WILNG acknowledges this comment and confirms that the risk for forest fires (wildfire) to be caused by the Project will be specifically addressed in Section 11 (accidents and Malfunctions) and mitigation measures will be implemented as warranted. The potential for wildfires to affect the Project will be considered in Section 12 [Effects of the Environment on the Project].</p> <p>The bullet in Section 12 [Effects of the Environment on the Project] has been amended to read "Fire, including wildfire". At this time, it is not anticipated that Crown land will be required for firebreaks or other fire-fighting-related activities.</p>	Resolved to EAO's satisfaction, changes reflected in the dAIR	
12	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	Project Description	4.1.1	<p>Grassly meadow vegetation clearance and firebreaks likely required. Include a detailed assessment of fuel types or specific management practices to reduce wildfire risk.</p> <p>The Sea to Sky Landscape Fire Management Plan (2014) indicates that the area is within a moderate fire risk zone, in the absence of LNG infrastructure. This risk zone will likely become elevated to high or extreme when the values of proposed infrastructure and hazards associated with the LNG facilities are included.</p>	Geomorphology and Natural Hazards, Environmental and Operational Management Plans	Yes	Application Review	<p>The Application will provide a comprehensive list and detailed descriptions of the approach and contents of the proposed environmental management plans (EMPs), which will include an EMP for Fire Hazard and Abatement. The EMPs will include identification of the mitigation measures.</p>	Unresolved - changes to the dAIR required	<p>Section 12 Effects of the Environment on the Project</p> <p>--- * Fire, including wildfires, with a detailed assessment of fuel types --- Section 13 Summary of Proposed Environmental and Operational Management Plans --- Environmental Management plans to be listed are expected to include the following --- * Fire hazard and abatement including specific management practices to reduce wildfire risk, with reference to the Sea to Sky Landscape Fire Management Plan (2014). ---</p>
13	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		a) Issues of Public Safety, for example being in an earthquake zone, has addressed;	Geomorphology and Natural Hazards	No	Application Review	Section 12 [Effects of the Environment on the Project] identifies the environmental factors deemed to have a potential effect on the Project, and WILNG confirms that this section will include effects and/or consequences that may result from such an event and measures that are in place to minimise the effects.	Unresolved - minor changes to the dAIR required	Section 12 Effects of the Environment on the Project --- * Natural seismic events, such as earthquakes, and associated effects, such as seiches, liquefaction, subsidence, and tsunamis -----
14	2-Jun-14	Kellie Leadham on behalf of McE and Mohr, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 51	Table 5-3 Proposed study parameters for geomorphology and natural hazards. This table should also include the potential change to baseline & study parameters for the removal of site overburden for site construction. The study parameters would be geochemistry and disposal options, if	Geomorphology and Natural Hazards	Yes	Application Review	Relevant site construction and Project layout development plans will be reviewed and assessed for the potential effects of the proposed development on the geomorphological and natural hazards parameters. This will include general discussions on potential changes to terrain-related attributes that may be affected during the site preparation, construction, operation, and decommissioning phases of the Project. Linkages of the geomorphology and natural hazards assessment to geochemical parameters will be identified and comment provided.	Unresolved - Please indicate where in the dAIR the linkages of the geomorphology and natural hazards assessment to geochemical parameters will be identified and comment provided. The dAIR needs to reflect this commitment.	

Comment ID	Date Submitted	Submitter Name and Title	Agency/Affiliation	Comment relevant to draft VC selection or dAIR?	Relevant section and page number	Comment/Issue Description/ Suggested Changes	Category/Theme	Change to the draft VC selection or dAIR required?	Application Review/Revised/Or Rejected?	Propagator's Response	EAO's Assessment of Response	Propagator's Follow-up Response/Action
15	26-May-14	Hatziantoniou, Regional Environmental Assessment Coordinator	Health Canada	VC	Table 2 (pg. 15)	HC advises EAO that the "Site Contamination" Intermediate component also provide a summary of any studies that may relate to country foods contamination, if applicable.	Site Contamination/ Public Health	Yes No	Application Review	W/LNG confirms that country foods will be addressed within the Public Health VC.	Unresolved - changes to the dAIR required. Section 5.7.1 Site Contamination Scoping and Rationale ...because there is potential pathway for disturbance and mobilisation of historical contamination during construction activities to affect ICs and VCs, including water quality and freshwater fish and fish habitat, and human health.... Section 5.7.3 Study Results The Application will consider potential Project-related changes to the Site Contamination (soils and sediment) IC as described in Section 4.0 Environmental Assessment Methods. If applicable, studies related to contamination of country foods will be cross-referenced in Section 9: Assessment of Potential Health Effects.... Is it anticipated that the site contamination and/or human health data be included in a technical report/appendix?	
16	26-May-14	Hatziantoniou, Regional Environmental Assessment Coordinator	Health Canada	dAIR	Table 4-3 (pg. 33), section 5.5.1.1 (pg. 52)	For the "Site Contamination" Intermediate component, HC suggests that a rationale be provided for why the RAA is the same as the LAA. If there is a potential for the migration of contaminants beyond the Woodfibre property, HC suggests that a larger RAA be considered.	Site Contamination	Yes No	Application Review	The current owner of the site, Western Forest Products (WFP) has committed to obtaining a BC MoE Certificate of Compliance (COC) prior to transferring the Woodfibre property to W/LNG. Contamination is localized to the site and to obtain a COC, the remediation must demonstrate that contaminants are not continuing to discharge into aquatic environments and that existing contaminants left in situ and remediated to risk-based standards will not in future be re-mobilized. Please note that the LAA is the "Project area", which is broader than the Woodfibre fee simple property, and includes a marine component.	Unresolved - changes to the dAIR required. Indicate that biological and chemical contaminants of potential concern will be assessed in the marine quality IC and cross-referenced to Interacting VCs. Section 5.7.2.1 Spatial Boundaries Local Assessment Area: The Woodfibre Property - The Project Area (make sure this is defined above, or else provide a definition of the area). Regional Assessment Area: Same as the LAA. Western Forest Products (WFP) has committed to obtaining a BC MoE Certificate of Compliance (COC) prior to transferring the Woodfibre property to W/LNG. In order to obtain a COC, the remediation must demonstrate that contaminants are not continuing to discharge into aquatic environments and that existing contaminants left in situ and remediated to risk-based standards will not in future be re-mobilized.	
17	2-Jun-14	Colin Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Environmental Protection, Oil & Gas/LNG Team	VC	Appendix A, pg. 1	Site contamination should be a VC, not an IC. There are applicable regulations and guidelines for managing contaminated sites in BC. The Contaminated Sites Regulation, associated soil standards and applicable COC conditions will be applicable for this site. The disturbance of contaminated soils and the potential environmental effects will have to be assessed. 3F	Site Contamination	Yes No	Application Review	On transfer of the fee simple property to W/LNG from Western Forest Products, W/LNG will be responsible for the implementation of the requirements of the COC and construction and operation of the Project will comply with the COC. As indicated in the VC Selection methodology, selected VCs should focus the assessment to consider components that are likely to be affected, and for which mitigation measures will offer guidance not already provided by government regulation. Because the COC will be in place prior to the start of construction, site contamination is considered an IC. The potential for interactions resulting in changes to the IC not considered by the COC, and mitigation if necessary, will be included in the IC section. Further, should there be a potential for residual effects as a result of Project activities, the potential effect will be addressed as a part of the assessment of a receptor VC.	Unresolved - changes to the dAIR required - (same as #19) Section 5.7.1 Site Contamination (Soils and Sediments) Scoping and Rationale (end of second paragraph) MOE regulation and guidance. A fully comprehensive technical report, including a detailed analysis of potential changes to soils and sediments (including potential generation of particulate matter disturbance and wind-blown dust) with reference to applicable Contaminated Sites Regulation, associated soil standards and applicable COC conditions applicable to the site, will be (appended to the Application / included in this section).	
18	2-Jun-14	Kimberly Needham, Director of Planning and Development Services	Squamish- Uluapet Regional District	VC	Environmental Pillar (Appendix A)	The spatial scope of the impacts of LNG goes beyond the site of the proposed facility. The study area should take into consideration all of BC, especially where the resource is being drilled and the land where the pipelines that transport this resource are located.	Site Contamination (Groundwater Quality)	Yes No	Application Review	The limits for the assessment of the scope of the Project are outlined in the Section 11 Order, Part B - Scope of the Proposed Project: 2.3 The following activities are not part of the proposed reviewable project for the purposes of this assessment: 2.3.2 Natural gas exploration and production activities: 2.3.2 The Eagle Mountain - Woodfibre Natural Gas Pipeline Project - north of Coquitlam Lake to Squamish that is subject of an order from the Environmental Assessment Office issued to FortisBC Energy (Vancouver Island) Inc. dated August 1, 2013; As indicated above, the pipeline that will transport natural gas to the proposed Woodfibre facility is being assessed as a separate project. Similarly, natural gas extraction projects are assessed separately. Cumulative effects will be assessed for each assessment discipline where the residual effects from the Project could interact spatially and temporally with the same residual effects from other identified Projects. Table 4-5 in the dAIR identifies the preliminary list of projects and activities that will be considered in the cumulative effects assessment. The Eagle Mountain - Woodfibre Pipeline Project has been added to Table 4-5.	Resolved to EAO's satisfaction - out of scope of the EA	

Comment ID#	Date Submitted	Submitter Name and Title	Agency/Ministry	Comments relevant to draft VC selection or dAIR	Relevant section and page number	Comment/Issue Description/Suggested Change	Category/Theme	Change to the draft VC selection (Y/N) Required?	Application Review/Permitting Requirement?	Proposed Response	EAO Assessment of Response	Proposed Follow-up Response/Action
19	2-Jun-14	Kellie Leadham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 51, Section 5.5	Air quality should be listed as an endpoint. Soil disturbance, especially during construction, will emit or allow to emit contaminated soil into the air. The proponent should quantify the mass of particulate matter emitted via disturbance and wind-blown dust and the mass of any components in the contamination that may affect the environment. WM	Site Contamination	Yes	Application Review	WM will adhere to the conditions of the COC, which we anticipate will address concerns for contaminants in surface soils and management requirements to avoid or minimize potential air emissions from surface soils.	Unresolved - changes to the dAIR required - (name as #17) Section 5.7.1 Site Contamination Scoping and Rationale (end of second paragraph) --- MDE regulation and guidance. A fully comprehensive technical report, including a detailed analysis of potential changes to soils and sediments (including potential generation of particulate matter disturbance and wind-blown dust) with reference to applicable Contaminated Sites Regulation, associated soil standards and applicable COC conditions applicable to the site, will be appended to the Application.	
20	2-Jun-14	Kellie Leadham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 52	Table 5-4 - Proposed study parameters for site contamination - parameters should also include contamination levels in aquatic biota. JF	Site Contamination	Yes	Application Review	Contamination levels in aquatic biota will be considered and assessed in the EA sections for the receptor VCs. Information on the study parameters can be found in the following sections: Section 5.10 Marine Water Quality, Table 5-9 Proposed Study Parameters for Marine Water Quality Parameter(s) column: Concentrations of biological and chemical contaminants of potential concern. Section 5.15 Freshwater Fish and Fish Habitat, Table 5-15 Potential Adverse Effects and Proposed Indicators for Freshwater Fish and Fish Habitat Subcomponents include resident fish, and anadromous fish, and indicators will include fish health and water quality. Section 5.16 Marine Benthic Habitat, Table 5-16 Potential Adverse Effects and Proposed Indicators for the Marine Benthic Habitat VC This table includes marine sediment and marine benthic habitat as subcomponents, with associated indicators including concentration of metals, concentration of hydrocarbons and other pollutants	Unresolved - changes to the dAIR required Section 5.7.3 Study Results The Application will consider potential Project-related changes to the Site Contamination IC (soils and sediments) as described in Section 4.0 Environmental Assessment Methods. Information related to site contamination (soils and sediments) will be cross-referenced to other IC/VCs, as necessary. Section 5.2 Atmospheric Quality, if applicable; Section 5.8 Surface Water Quality; Section 5.10 Marine Water Quality; Section 5.15 Freshwater Fish and Fish Habitat, if applicable; Section 5.16 Marine Benthic Habitat; Other Marine Resource sections (Fish, birds or mammals, etc) as applicable; Section 9 Human Health and/or Any other sections as required (i.e., Groundwater Quality). If it is anticipated that site contamination data be included in a technical report(s)/appendix(es), provide a statement of commitment in the dAIR, including a list of technical reports to be included, if applicable.	
21	26-May-14	Yota Hatanaka, Regional Environmental Assessment Coordinator	Health Canada/VC	dAIR	VC Table 2 (pg. 13) & dAIR Table 5-5 (pg. 54)	HC advises EAO that the parameters for the "Surface Water Quality" intermediate component also include any organic and inorganic contaminants of potential concern. If these have been identified in previous contaminated sites studies for the Woodfibre property, HC would prefer that this additional information be considered if there are any recreational or drinking water uses on/near the project site.	Surface Water Quality	Yes No	Application Review	Water quality parameters for contaminants of concern from previous site contamination will be presented in Section 5.7 (Site Contamination), and if present, managed through the COC requirements. The Project is located on fee simple land with no plans for freshwater recreation within the Project area. WNLNG is currently planning to construct a surface water intake on Mill Creek, which may be used for potable water. Any potable water would be treated to meet applicable drinking water standards. Potential contaminants as a result of an accident or malfunction will be addressed in Section 11.0 Accidents and Malfunctions.	Unresolved - changes to the dAIR required (Recommend changing "Site Contamination IC" to "Soils and Sediments IC") Table 5-7, Under "Parameters". Includes: any organic and inorganic contaminants of potential concern, if these have been identified in previous contaminated sites studies for the Woodfibre property, in the event that recreational or drinking water uses on/near the project site are identified.	
22	2-Jun-14	Kellie Leadham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 54	Table 5-5 - Proposed study parameters for surface water quality - Other water quality parameters (including pH, TSS, TDS, turbidity, dissolved oxygen, hydrocarbons, ammonia, nitrate, nitrite, total metals, major anions and cations, historical contaminants) that may be affected by the Project need to be included in the assessment, as turbidity is not the only parameter that could be affected by this development. (ie, pg.51 "there is potential pathway for disturbance and mobilization of historical contamination during construction activities to affect ICs and VCs, including water quality and freshwater fish and fish habitat." Site appropriate parameters will require evaluation.) JF	Surface Water Quality	Yes	Application Review	Water quality parameters for contaminants of concern from previous site contamination will be presented in Section 5.7 Site Contamination, and if present managed through the COC requirements. Potential pathways for disturbance of existing contamination from Project activities, not considered in the COC, will be addressed in this section, and mitigation provided for identified pathways. The text in the surface water quality section has been revised for clarity: dAIR, page 54 (now page 61): Potential changes to fresh water resources from activities associated with the remediation and COC will not be considered in this section as these discharges are considered part of the conditions and associated monitoring for the COC.	Unresolved - Changes to the dAIR required - See above (#21) Section 5.8.3 Study Results (last sentence of last paragraph) The specific parameters used to assess the potential effects will be selected based on existing regulatory standards (e.g., temperature, water chemistry, benthic invertebrates, etc.). Table 5-7 Proposed Study Parameters for Surface Water Quality (under Parameters) pH, TSS, TDS, turbidity, dissolved oxygen, hydrocarbons, ammonia, nitrate, nitrite, total metals, major anions and cations *(or provide a rationale why each of these parameters will not be affected by the project/does not need to be included in the assessment).	
23	2-Jun-14	Kellie Leadham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Environmental Protection, Oil & Gas/LNG Team	dAIR	Pg. 82	Table 5-15 Potential adverse effects and proposed indicators for freshwater fish and fish habitat - Water quality needs to be a VC (see comments above). Other water quality parameters (including pH, TSS, TDS, turbidity, dissolved oxygen, hydrocarbons, ammonia, nitrate, nitrite, total metals, major anions and cations, historical contaminants) that may be affected by the Project need to be included in the assessment, as turbidity is not the only parameter that could be affected by this development. (ie, pg.51 "there is potential pathway for disturbance and mobilization of historical contamination during construction activities to affect ICs and VCs, including water quality and freshwater fish and fish habitat." Site appropriate parameters will require evaluation.) JF	Water Quality, Freshwater Fish and Fish Habitat	Yes No	Application Review	Water quality parameters for contaminants of concern from previous site contamination will be presented in Section 5.7 Site Contamination, and if present managed through the COC requirements. Potential pathways for disturbance of existing contamination from Project activities, that are not considered in the COC (if any), will be addressed in this section, and mitigation provided for identified pathways. The effects of Project-related changes to water quality on receptor VCs will be assessed in that respective VC section.	Unresolved - Changes to the dAIR Required - (i) Section 5.8.2 Surface Water Quality Scoping and Rationale (end of second paragraph) --- Human health. A fully comprehensive technical report, including a detailed analysis of potential changes to surface water quality, will be included in the surface water quality section. Section 5.8.3 Study Results (last sentence of last paragraph) The specific parameters used to assess the potential effects will be selected based on existing regulatory standards (e.g., temperature, water chemistry, benthic invertebrates, etc.).	

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Comment ID	Date Submitted	Submitter Name and Title	Agency/Ministry	Comment relevant to Draft VC/ Selection or dAIR?	Relevant section and page number	Comment / Issue Description / Suggested Changes	Category/Theme	Change to the Draft VC/ Selection or dAIR required?	Application Review and/or Permitting Requirement?	Proponent's Response	EAO's Assessment of Response	Proponent's Follow-up Response/Action
										Potential changes to marine water quality include changes to water chemistry and the thermal regime. Mitigation measures during construction will also be included in the CEMP for erosion prevention and sediment control. If there are anticipated residual effects to the receptor VC after mitigation measures are applied, they will be included in the relevant environmental management plans. In addition, potential accidents and malfunctions that may affect marine water quality will be addressed in Section 11 (Accidents and Malfunctions).		
26	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 23	Table 4-1 List of Values Components and Technical Components – Surface water and marine water quality should be VC's, if	Surface Water Quality, Marine Water Quality	Yes No	Application Review	Please see response to Comment #25.	See comment #25	
27	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 53	"It is anticipated that the Project will use an existing permitted wastewater treatment system, which will be replaced during construction." A registration under the Municipal Wastewater Regulation may be necessary for sewage treatment effluent. If the current capacity increases by more than 10% of the existing permitted facility. According to the project details, it appears that a waste discharge permit to release LNG process water and/or water discharge from condensate blow-down may also be necessary. Having baseline information on water quality and a description of the predicted effluent discharge, will be critical factors for BC MoE to conduct an assessment of the project information and subsequently support issuing a waste discharge permit. If	Surface Water Quality	Yes No	Permitting Requirement OGC	WLNG will obtain the required permits pending issuance of an EA certificate. Baseline information on water quality will be presented in Section 5.8. Preliminary information on treated discharges will be presented as a component of the Project Description in Section 2.2.5. Please note that there will be no discharges to fresh water. Please note that waste discharge permitting for the Project will be handled by OGC.	Resolved to EAO's satisfaction.	
28	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 84	Marine contaminant levels in the study area, also needs to be included. What field surveys are planned for this assessment? The MoE has currently drafted site-specific water quality objectives to protect and manage water quality in the Howe Sound watershed. In the future, these objectives would be applicable for this area. If	Water Quality	Yes No	Application Review	Marine contaminants as a result of previous industrial activity are summarized in Section 5.7 (Site Contamination), and will be addressed through the requirements of the COC. Marine water quality is addressed in Section 5.10. Where applicable, the studies will provide cross-reference to the marine and freshwater fish and fish habitats, along with the surface water quality section of the IAC application.	Unresolved - changes to the dAIR required Suggest renaming "Site Contamination IC" to "Soil and Sediments IC" Table 5-7, under "Parameters, includes: any organic and inorganic contaminants of potential concern, if these have been identified in previous contaminated sites studies for the Woodfibre property, in the event that recreational or drinking water uses are/near the project site are identified. Section 5.10.1 Marine Water Quality Scoping and Rationale (and of first paragraph) ...forage fish, and other fish). A fully comprehensive technical report, including a detailed analysis of potential changes to marine water quality, will be appended to the Application. Provide more information on planned studies for MoE as requested. Will the assessment include potential impacts on marine water quality from mobilization of legacy contaminants due to ship activity within the Project area? If yes: Update the dAIR to include the required information, if not provide rationale.	
29	7-May-14	James Davies, Regional Hydrologist	MFLNRC - South Coast - Authorization	VC	Surface Water – Quantity, Table 2, page 15	Several Water licences are appurtenant to DL 2351, the location of the proposed project. As of May 2, 2014, our water licensing system shows these water licences are held by Western Forest Products Inc., for industrial (pulp mill) and Waterpower purposes. The December 2013 Woodfibre LNG Project Description does not explain that the water licensee has intentions of transferring all, or part, or none, of his water rights to Woodfibre LNG. However, the dAIR (page 55), states there will be a transfer of water rights, but it is not clear whether this means all, or part, or the current water licences. Western Forest Products Inc. are not listed in Table 10 as a Stakeholder in Section 9.3 of the December 2013 Project Description. It is noted that Western Forest Products issued a news release in January 2013, saying that they had entered into a conditional agreement for the sale of its former Woodfibre Pulp Mill site. These types of amendments are initiated by the water licensee, or the landowner. These amendments would need to be approved by the Canadian Water under the Water Act. As of May 2, 2014, our water licensing system shows the water licences appurtenant to DL 2351 are not under amendment.	Surface Water Quantity	Yes No	Permitting Requirement OGC	We understand that the existing water licences will be transferred from Western Forest Products upon transfer of the appurtenant land parcels to WLNG. WLNG will update the licences as needed with OGC, as part of the permitting process.	Resolved to EAO's satisfaction.	

Woodfibre LNG Project – Draft VC Selection/ Draft AIR Working Group Comment Tracking Table

Date: May 27, 2014
File:
Revision:

Comment ID	Date Submitted	Submitted by (Name and Title)	Agency/Authority	Comment relevant to Draft VC selection or dAIR?	Relevant section and page number	Comment/Issue Description/Requested Changes	Category/Theme	Change to the Draft VC selection/dAIR required?	Application Review and/or Permitting Requirement?	Proposed Response	EAQ's Assessment of Response	Proposed Follow-up Response/Action
						<p>There are current Water Rights on the project land. The existing water licences could be amended by a change of works, a change of licensee, or a change of purpose. If DL 2351 was subdivided, the water licences appurtenant to this land would be subject to an apportionment. This means a new water licence application may not be needed, as a current licence could be used – if it was amended.</p> <p>To make an assessment of available water versus licensed demand on Woodfibre Creek and on Mill Creek, the present water rights and applicants on the streams need to be confirmed, and any future transfer of apportionment, apportionment, or amendments identified.</p> <p>VC, version 2.0, April 30, 2014 dAIR, version 2.0, May 5, 2014</p>						
30	7-May-14	James Davies, Regional Hydrologist	MFLNRO- South Coast- Authorization	dAIR	5.7.1 page 54	<p>The dAIR does not provide a review of the water licences appurtenant to the land.</p> <p>dAIR, page 55: The licences are to be transferred by the water licence to the proponent, and utilized during the construction and operation of the project.</p> <p>This is not complete information on the water licences as to determine the required amendments. Additional information would be required as the Decision Maker for approving a change of works, a transfer of water rights, or a change of purpose, has to consider whether an existing water licence or applicant for a water licence may be adversely affected, when the Decision Maker makes his adjudication on the proposed change or amendment.</p> <p>For example:</p> <ul style="list-style-type: none"> • If a water supply intake was constructed on Mill Creek (dAIR, page 52), could this affect a licensee or an applicant? • Would there be any changes to the Montville Lake or the Sylvia Lake storage works? • What would happen to the water power licences? <p>The application needs to explain the current water licences and applications on Woodfibre Creek and on Mill Creek, and how some, or all, of these licences would be changed for this project.</p> <p>dAIR, version 2.0, May 5, 2014</p>	Surface Water Quantity	Yes	Permitting Requirement OGC	<p>All water licences on Mill Creek and Woodfibre Creek are held by Western Forest Products and appurtenant to DL 2351. Accordingly, we anticipate that all water licences will be transferred to WNLG upon the transfer of DL 2351. WNLG will work with the OGC during the permitting phase to ensure all water licences are amended as required.</p> <p>Text in dAIR was revised for clarity:</p> <p>Existing water licences for withdrawal of water and for power production on Woodfibre Creek and Mill Creek are appurtenant to the land that will be transferred to the Proponent and will be transferred with the land.</p> <p>In addition, Section 2.7 (Applicable Permits) will list the permits that will be required for construction, operation and decommissioning of the Project.</p>	Resolved to EAO's satisfaction.	
31	2-Jun-14	Kellie Leedham, on behalf of MoE and MoM, Manager, Operations	Ministry of Environment- Protection, Oil & Gas/LNG Team	dAIR	Pg. 55	<p>5.7.2 Existing Conditions – First sentence, there appears to be a typo surface water "quality" should be "quantity" IF</p>	Surface Water Quantity	Yes		<p>WNLG acknowledges this comment, and has corrected Section 5.5.1 (formerly 5.7.2). First paragraph (correction in red): This section will provide information on the existing surface water quality-quantity conditions, which will be characterized by the following:</p>	Resolved to EAO's satisfaction – changes reflected in the dAIR.	
32	2-Jun-14	Kellie Leedham, on behalf of MoE and MoM, Manager, Operations	Ministry of Environment- Environmental Protection, Oil & Gas/LNG Team	VC		<p>Proposed VC as follows: Water Quantity</p> <p>Rationale: Project may have water licence requirements (need to obtain a licence for water use under the Water Act). How much water would be necessary for water cooling? What is the effect on the water chemistry & aquatic resources?</p> <p>Project Effects: Water use requirements from the facility may have an effect on other water users – decrease in surface flows.</p> <p>Measurable Parameters: Hydrometric data – surface flows, groundwater levels & flow direction. IF</p>	Water Quantity	Yes No	Application Review	<p>Water quantity is included as an IC as it is an intermediate consideration for assessment of effects to receptor VCs such as freshwater fish and fish habitat.</p> <p>Information on the existing conditions and potential changes related to Project activities will be included in Section 5.9. Permitting requirements will be summarized in Section 2.7 (Applicable Permits) and addressed with the OGC at the time of transfer of the land and appurtenant water licences.</p> <p>Water for cooling will be drawn from Howe Sound, and potential changes to marine water quality are addressed in Section 5.10.</p> <p>As outlined in Section 5.9.1 of the dAIR, freshwater demand from the Project in conformance with the existing licences may affect flows within Woodfibre Creek and/or Mill Creek to the extent of the previous usage by Woodfibre Pulp and Paper. There aren't any water licences on Mill or Woodfibre creeks apart from those held by Western Forest Products that will be transferred to WNLG.</p>	Unresolved – Changes to dAIR Required (same as above) (i) Section 5.9.1 Surface Water Quantity Scoping and Rationale (end of first paragraph) ...fish habitat and wildlife. A fully comprehensive technical report, including a detailed analysis of potential changes to surface water quantity, will be appended to the Application, including hydrometric data such as, surface flows, groundwater levels and flow direction.	
33	26-May-14	Yota Hatzilantonou, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC Table 2 (pg. 19) & dAIR Table 5-7 (pg. 58)	<p>VC advises EAO that there appears to be a discrepancy in the parameters listed for the "Marine Water Quality" intermediate component (IC) presented in the VC document, versus the dAIR. VC prefers that any organic and inorganic contaminants of potential concern be considered for this IC – especially if there are any recreational and fishing uses near the project site.</p>	Marine Water Quality	Yes	Application Review	<p>Table 5-9 in the dAIR has been updated to be more specific regarding the concentrations of biological and chemical contaminants of potential concern associated with treated process water, waste water and stormwater discharges. Suspended solids, turbidity, nutrients, metals and hydrocarbons are now listed.</p>	Unresolved – changes are not reflected in the dAIR In the June 26 version, biological and chemical contaminants of potential concern are crossed out. Please ensure these will be assessed and are included as an indicator of marine water quality in addition to nutrients, metals, hydrocarbons (petroleum and PAHs). Are we talking about dioxin/furans? VHM the assessment include potential impacts on marine water quality from mobilization of legacy contaminants due to ship activity within the Project area? If yes: Update the dAIR to include the required information. If no: provide rationale (same comment #28).	

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34	2-Jun-14	Kellee Leedham, on behalf of MoE and MoM, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 57	Marine water quality needs to be a VC, particularly since the Project will have a surface discharge that will require an effluent permit under the Environmental Management Act. In addition to baseline water quality, a description of the predicted effluent will be required. <u>Important information to include for the Aquatic Environment Assessment:</u> Map and compile information on operations or activities that discharge contaminants to surface waters: a) locations of current and proposed permits that allow a wastewater to be discharged to a surface water; b) locations of current and proposed discharges to surface water regulated by a Code of Practice or a Regulation under an Act of the Legislature; c) any locations of current and proposed discharge of storm water or other unregulated discharges from a land surface; d) Identify any sensitive habitats or species of concern that may be affected by the proposed construction and operation of the project; e) Identify predicted impacts to aquatic resources from proposed construction and operation including aquatic sediments and benthic environments, if	Marine Water Quality	Yes	Application Review and Permitting Requirement OGC	Marine water quality is an IC, as it is a consideration in the pathway for the assessment of receptor VCs. WLNG confirms that information needs to be outlined in the comment (bullets a) to e)) will be included in the SA; however, we note that the effects to sensitive habitats and aquatic resources will be assessed in the relevant VC sections, supported by the Marine Water Quality IC. A preliminary description of the treated effluent discharges will be presented in the EAC Application, and detailed information will be provided as needed for permitting phase. There will be no discharge to surface water. Baseline information on marine water quality will be presented in Section 5.8, and potential changes to marine water quality as a result of Project activities will be reviewed in relation to the regulatory threshold for VC receptors. If the potential for a residual effect is identified, the potential residual effect will be assessed in this section for the VC receptor with the water quality thresholds for that receptor. Identified VC receptors for marine water quality include for eelgrass, fish and fish habitat, forage fish and other fish (marine), marine birds and marine mammals.	Unresolved - changes to the dAIR required - (as above, partial Comment #25) Section 5.10.1 Marine Water Quality Scoping and Rationale (end of first paragraph)forage fish, and other fish). A fully comprehensive technical report, including a detailed analysis of potential changes to marine water quality, will be appended to the Application.	
35	16-May-14	Yvonne Hazelton, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC Table 1 (pg. 10), Appendix A (pg. 1) & dAIR Table 4-1 (pg. 26), Table 5-AAGOs for 1-hr NO2 and 2-hr SO2 (to be officially released at a later date), and that these are below the current published objectives for NO2 and SO2. HC suggests that the Proponent undertake an analysis of predicted concentrations of NO2 and SO2 against both the interim BC objectives and/or the objectives of other jurisdictions (e.g., World Health Organization), as may be applicable. This advice is provided in anticipation of lower NO2 and SO2 objectives being in effect during Project construction/operation, and with the expectation that these lower objectives will be more protective of human health. Finally, HC suggests that a full inventory be provided of all potential air pollutants, including any refrigerants, solvents or other process chemicals (and their by-products) that may be vented, combusted, or accidentally released into the atmosphere. This would enable a better understanding of surrounding population exposure and potential risk.	Atmospheric Environment (Air Quality)	yes	Application Review and Permitting Requirement OGC	The effects assessment will consider relevant emissions based on Project-specific engineering data on air emissions. We are aware of the forthcoming NO2 and SO2 BC air quality standards, but understand that they have not currently been released by the MoE. These criteria will be considered within the effects assessment, if they are available within a time period that permits inclusion in the effects assessment. The potential for fugitive emissions and emergency scenarios will be considered within the effects assessment.	Unresolved - provide a rationale why H2S, Ozone, etc are not included in the assessment. WNLG to follow-up with MoE that the information requirements in the AIR are sufficient for air quality assessment.		
36	16-May-14	Yvonne Hazelton, Regional Environmental Assessment Coordinator	Health Canada	dAIR	Section 5.2 (pg. 58) - general comment	As part of the "Atmospheric Environment" VC, HC advises EAO that the Proponent assess an additional "emergency flaring/back-up power generation" scenario. The current assessment steps for this VC do not capture this potential scenario - the results of which would help to characterize potential adverse effects to humans.	Atmospheric Environment (Air Quality)	yes	Application Review	Emergency scenarios will be considered in the effects assessment undertaken for the Project operational phase. This will include consideration of H2S emissions.	Unresolved - changes to the dAIR required: Section 5.2.3 Potential Interactions of the Project and Proposed Mitigation The Application will consider emission to air from the LNG facility (including emergency scenarios undertaken for the project operation phase, which will include consideration of H2S emissions) and associated shipping activities.....	
37	2-Jun-14	Kellee Leedham, on behalf of MoE and MoM, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team			If electric drive is not the selected emission technology, air emissions can potentially cause acidification and eutrophication effects in the project area. Additional information would be required for the environmental assessment, including a screening level assessment to determine whether a level 1 critical load assessment employing models is required as documented in the Draft Critical Loads Screening Chart (see attachment 1). Additional VCs would include freshwater lakes, streams, soils and vegetation, if	Atmospheric Environment (Air Quality)	No		WLNG confirms that the plant will use an electric drive. On-site generators will be used for back-up power to run all emergency power and safety systems.	Resolved to EAO's satisfaction.	
38	2-Jun-14	Kimberly Neeldham, Director of Planning and Development Services	Squamish-Uskoot Regional District	dAIR VC	5.8.1, pg. 58 Environmental Pillar, Section 7.5 Visual Quality (Appendix A)	Potential for smog/veg will impact other VC - socio/economic as it could impact tourism or tourist related activities.	Atmospheric Environment (Air Quality) and Visual Quality	yes	Application Review	Where appropriate, the changes to the Atmospheric Environment (Air Quality) IC will be carried forward into the assessment of receptor VCs.	Unresolved - changes to the dAIR required: Section 7.5.3 Potential Interaction of the Project and Proposed Mitigation (Add a bullet) Where appropriate, the changes to the Atmospheric Environment (Air Quality) IC will be carried forward into the assessment of the Visual Quality VC. For example, potential effects of smog/veg as a result of the project on visual quality.	

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39	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR?	Pg. 31	Table 4-2 – Air Quality should be listed as a VC in this table. #	Atmospheric Environment (Air Quality)	Yes	Application Review	The text in this table has been changed to read 'Atmospheric Environment (Air Quality)' Please note that after discussions with regulators and the confirmation of electric drive being used for the Project, the 'Atmospheric Environment (Air Quality)' has been changed from a VC to an IC (intermediate component).	Unresolved - Section 5.2 lists Air Quality as a VC Indicate that detailed Air Quality Modelling will be included in a fully comprehensive technical report, appended to the Application.	
40	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg. 33	Table 4-3 – Regional study area boundaries. Atmospheric environment should explicitly include air quality as a VC. #	Atmospheric Environment (Air Quality)	Yes	Application Review	The text in this table has been changed to read 'Atmospheric Environment (Air Quality)' Please note that after discussions with regulators and the confirmation of electric drive being used for the Project, the 'Atmospheric Environment (Air Quality)' has been changed from a VC to an IC (intermediate component).	Unresolved - Section 5.2 lists Air Quality as a VC Indicate that detailed Air Quality Modelling will be included in a fully comprehensive technical report, appended to the Application.	
41	2-Jun-14	Laura Guzman, Policy Analyst	Climate Action Secretariat	dAIR	Tables 4-1 List of Value Components and section 5.10.3	List of value components should specify all greenhouse gases included in the reporting regulations: CO ₂ , CH ₄ , N ₂ O, PFCs, HFCs, and SF ₆ .	Greenhouse Gas Management	yes		The assessment will consider all significant sources of GHG emissions. There are not expected to be any significant sources of PFCs, HFCs, and SF ₆ .	Unresolved - follow-up with CAS to ensure that the AIR contains all the necessary information requirements related to GHGs. EAO notes that the dAIR includes emissions of CO ₂ , CH ₄ , and N ₂ O, while CAS recommends CO ₂ , CH ₄ , N ₂ O, PFCs, HFCs, and SF ₆ . Provide a rationale why methane is not included. Provide a rationale why N ₂ O instead of NO ₂ . Provide a rationale why no PFCs, HFCs and SF ₆ is anticipated.	
42	2-Jun-14	Laura Guzman, Policy Analyst	Climate Action Secretariat	dAIR	Section 5.1.0 and 5.10.3	GHG emissions must be calculated using the methodology described in the reporting regulations in the Greenhouse Gas Reductions Target Act (Cap and Trade). As well, any deforestation, if any, that occurs as part of the construction of the facility, must be included and GHG emissions estimated according to guidelines provided by Ministry of Forestry, Lands and Natural Resources	Greenhouse Gas Management	yes		GHG emissions will be calculated using commonly accepted methods. This will include quantification methods described in the reporting regulations in the Greenhouse Gas Reductions Target Act (Cap and Trade). Loss of carbon sink due to any deforestation will be quantified using the guidelines provided by MFLNR.	Unresolved - changes to the dAIR required Section 5.3.3 Potential Interactions of the Project and Proposed Mitigation In addition, annual GHG emissions from the Project will be estimated for the Project Operational phase, using the methodology described in the reporting regulations in the Greenhouse Gas Reductions Target Act (Cap and Trade), and will be compared to the provincial.... Question: What about GHG emissions during construction and decommissioning? Will they be assessed?	
43	2-Jun-14	Laura Guzman, Policy Analyst	Climate Action Secretariat	dAIR	Section 5.10.3	This section must include the provision of a GHG Management plan including mitigation measures for construction, operation and decommission phases of the project. Currently this section describes characteristics of GHG assessment, but it does not consider the provision of a GHG Management plan and mitigation measures	Greenhouse Gas Management	yes		GHG mitigation and management measures will be included in the GHG/Climate Change effects assessment.	Unresolved - changes to the dAIR required Section 5.3.3. Potential interaction of the Project and Proposed Mitigation (at the end of section)... This section will include a (description/summary) of GHG mitigation and management measures applicable to the construction, operation and decommissioning phases of the Project. More information on the GHG mitigation and management will be included in Table 22-1 Proposed Mitigation Measures and Section 13.0 Summary of proposed environmental and operation management plans, respectively.	
44	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	dAIR	s. 5.11.5. 13	Vegetation Communities. Can forest health of surrounding forest types and ecosystems be monitored where they may be susceptible to natural gas venting or other industrial activities. Forest health should be monitored over long term to determine whether any change is detected. s. 13 lists wildlife/vegetation as a proposed monitoring plan.	Vegetation Communities	yes No		The Project does not include venting natural gas within the terrestrial environment. As such, monitoring of forest health specific to venting has not been considered. Monitoring for vegetation communities will be recommended as needed based on the results of the assessment, and included in the Wildlife and Vegetation Monitoring Plan as identified in Section 13.	Unresolved - may result be a condition of certificate. changes to the dAIR required. Where is the venting of natural gas anticipated, if not in the terrestrial environment, unclear? Section 5.21.4 Residual Effects and their Significance (at the end of section) In the event that the assessment determines that the Project has the potential for residual impact to local and regional vegetation communities, details of a long-term wildlife/vegetation monitoring program will be included in the Wildlife and Vegetation Monitoring Plan in Section 13.	
45	2-Jun-14	Scott Barrett, Manager Resource Stewardship	FLNR - South Coast Region	VC	5.12 Avifauna VC p.65	Project is within the suspected range for Northern Goshawk (Belding sub-sp); It is unclear why it was not selected as a VC?	Avifauna	No	Application Review	Northern goshawk (<i>Accipiter gentilis beldingi</i>) was assessed for consideration as a VC and subsequently excluded as the species is not expected to occur, or be affected by, Project development. There is no suitable goshawk habitat within the Project area and there are no anticipated Project-related effects as there is no anticipated forest clearing within any suitable goshawk habitat. There are four proximal northern goshawk detections at McTab Creek, Punny Creek, Red Tusk Creek and Clewiston Lake. However, none of these sites have recent confirmed activity; all sites are currently considered extirpated. Draft recovery habitat has been mapped (CWS 2012) to provide species-specific management at three of these sites, however, all mapped habitat is >30km from the Project boundaries.	Unresolved - Canadian Wildlife Services will be providing additional direction on the assessment of SARA-listed species, and the requirements of CEAA 2012.	

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53	2-Jun-14	Russell Mouye, Fire Chief	Squamish Fire Rescue	VC	Labour Market 6.2.9.56	Labour Market	No	Application Review	WNLG confirms that potential effects of the Project on the local labour market will be assessed.	Unresolved - changes to the dAIR required Section 6.2.3 Potential Interactions of the Project and Proposed Mitigation The Application will address potential Project interactions with the Labour Market VC, including labour shortages and identification of those industries most at risk, and potential mitigation as described....
54	2-Jun-14	Russell Mouye, Fire Chief	Squamish Fire Rescue	VC	Labour Market 6.2.9.57	Labour Market	No	Application Review	WNLG confirms that potential effects of the Project on the local labour market will be assessed.	Unresolved - The response does not speak to the comment on measuring potential effects on social services from the increase of wages.
55	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR	(i) Sustainable Economy Values Components (VC): (ii) There may be impacts/benefits for SCRD, Town of Gibsons and Islands Trust areas. Thus the draft AIR should make reference to SCRD and Islands Trust. Reference is made to the Howe Sound area being the regional area for the marine port under the economy heading. This should be amended to refer to the SCRD, Islands Trust (Gambier Island Local Trust specifically) and Town of Gibsons;	Sustainable Economy	No	Application Review	The LAA for the Labour Market and Regional Economic Development VCs includes Squamish, Resort Municipality of Whistler, Squamish First Nation communities and Metro Vancouver, as they are the local area that will be drawn upon for labour and goods and services for reasons of proximity and access to the Project site. The RAA references all of British Columbia, as other communities within a regional context will cited in the RAA baseline.	Unresolved - the commercial marine use sub-component regional area is Howe Sound as shown in Figure 4-8.
56	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR	(ii) Commercial marine use is a significant sub-component and impacts on SCRD area (specific reference to Hilsdale industrial area), Gambier Island Local Trust and the Town of Gibsons as areas that should also be noted for consideration/study;	Sustainable Economy	No		The assessment of potential Project effects on the Commercial Marine Use VC is focused on water-based activities, including docking. The RAA references all of British Columbia, as other communities within a regional context will cited in the RAA baseline.	Unresolved - the commercial marine use sub-component regional area is Howe Sound as shown in Figure 4-8.
57	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR	(iii) There may be scope for other locations to provide workforce and other ports/docks could be used for worker/material transport. The draft AIR should include reference to considering/reviewing additional locations;	Sustainable Economy	No		WNLG acknowledges the comment and will consider additional locations for provision of services or materials, where feasible.	Unresolved - updated to the dAIR required to reflect the commitment.
58	2-Jun-14	Russell Mouye, Fire Chief	Squamish Fire Rescue	VC	6.3 Sustainable Economy P.58	Sustainable Economy	No		WNLG confirms that potential effects of the Project on local government revenues and expenditures (both from direct Project use and use by Project employees) will be assessed.	Resolved to EAO's satisfaction.
59	2-Jun-14	Kimberly Needham, Director of Planning and Development Services	Squamish-Lillooet Regional District	dAIR	VC	6.0, Page 95, 104 (Social and Economic Pillars, Appendix A)	Yes	Application Review	The LAA for the Labour Market and Regional Economic Development VCs in the dAIR will be amended to include Election 10 of the Squamish-Lillooet Regional District. This will result in the inclusion of certain unincorporated communities, such as Furry Creek, in the LAA.	Resolved to EAO's satisfaction - changes reflected in the dAIR.
60	2-Jun-14	Kimberly Needham, Director of Planning and Development Services	Squamish-Lillooet Regional District	dAIR	Pg. 105	Social Effects (Emergency Services)	Yes	Application Review	The assessment of the potential effects of the Project on the Emergency Services sub-component will take into account the service areas of local and regional emergency service providers.	Unresolved - changes to the dAIR required Section 7.2.3 Potential Interaction for the Project and Proposed Mitigation (end of first paragraph) The assessment of the potential effects of the Project on the Emergency Services sub-component will take into account the service areas of local and regional emergency service providers.
61	2-Jun-14	Russell Mouye, Fire Chief	Squamish Fire Rescue	dAIR	7.2.1.3-P104	Infrastructure and Community Services	No	Permitting Requirement Local government	Thank you for the information on Squamish Fire Rescue. WNLG will ensure Project-specific emergency services during construction and operation, and additional information regarding facilities and training will be included in the EAC application, the CEMP and emergency response plans. The supporting infrastructure for emergency services, including equipment and water requirements, will be addressed prior to the start of construction. The Project will be self-sufficient in terms of emergency response during operations. Should the Squamish Fire Department require further information, WNLG will be pleased to discuss directly with them.	Unresolved - please indicated that WNLG has met with the Squamish Fire Department and will continue to consult with them re: emergency response plans.
62	2-Jun-14	Russell Mouye, Fire Chief	Squamish Fire Rescue	dAIR	7.2.3-P106	Infrastructure and Community Services	No	Permitting Requirement Local government	The Project will be self-sufficient in terms of emergency response during operations.	Unresolved - please indicated that WNLG has met with the Squamish Fire Department and will continue to consult with them re: emergency response plans.

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63	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue		7.2.3 - P107 Table 7-1	Squamish Fire Rescue currently does not offer any Marine based emergency services including ship board firefighting services.	Infrastructure and Community Services	No	Permitting Requirement Local Government Application Review	WNLG acknowledges this information provided by the Squamish Fire Rescue. The Project will be self-sufficient in terms of emergency response during operations.	Unresolved - please indicated that WNLG has met with the Squamish Fire Department and will continue to consult with them re: the emergency response plans.	
64	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	VC	7.2 Infrastructure and Community Services P.104	The increase in infrastructure use will create changes in capacity utilization and staffing costs while decreasing the overall availability of access. An analysis of mitigation methods to lessen the impact on infrastructure should be undertaken.	Infrastructure and Community Services			WNLG confirms that there will be an assessment of potential Project effects on the Infrastructure and Community Services VC. If Project-associated effects are identified in these areas, then the Project mitigation measures will be included in the EA application	Unresolved - Changes to the dAIR required - Section 7.2.3 Potential Interactions of the Project and Proposed Mitigation (end of last paragraph) --- provided in Table 7-L If negative residual effects are identified in for the Regional and Community Infrastructure and Services VC, then a detailed description of proposed mitigation measures to reduce such negative impacts will be included in the EA application.	
65	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada (TC)	VC	VC, Page 17 and 26, dAIR: 133 Table 7-2	TC is in agreement that Marine Transportation should be included as a Valued Component. TC recommends the following "Potential Adverse Project Effects" in order to capture all interferences resulting from the project on marine navigation: 1. Interference with marine navigation. 2. Interference with marine fisheries. 3. Interference with marine recreation and tourism. 4. Interference with marine aboriginal use. TC recommends the following "Indicators" or "Measurable Parameters" relating to the above Project Effects: 1. Proportion of navigable channel affected by construction and operation of marine terminal, including safety zones. 2. Number and types of marine vessels as a result of the proposed project; Location of fisheries including access routes; Attribute data on marine uses along shipping channel (i.e. gear used in fisheries, volume of landings of target species). 3. Marine recreational and tourism activities/destinations/access routes overlapping with proposed Project and marine access routes; Indicators of visitor frequency. 4. Marine aboriginal use activities/destinations/access routes overlapping with proposed Project and marine access route.	Marine Transport	Yes	Application Review	The Marine Transport VC assessment of potential effects in the EAC Application will cover the items requested including: 1. Interference with marine navigation 2. Interference with marine fisheries (limited to DFO day catch data) 3. Interference with marine recreation and tourism (tourism also covered in the LRU Chapter) 4. Aboriginal marine use will be addressed in Part C Aboriginal Groups Information and Requirements. The parameters listed will also be used in the effects assessment with noted exceptions: 1. Included as an indicator. 2. Included as an indicator. However, DFO boat day data will be used instead of volume of landings of target species as this is more applicable to marine transportation. Data on fisheries access routes will be limited to indicating general areas used. 3. Included as an indicator (tourism) will also be addressed in the LRU VC. Data on visitor frequency is limited. 4. Marine aboriginal use including activities/destinations/access routes overlapping with proposed Project and marine access routes use will be addressed in Part C Aboriginal Groups Information and Requirements.	1. Resolved to EAO's satisfaction - changes reflected in the dAIR 2. Unresolved - Changes to the dAIR required Table 7-2 Potential Adverse Effects and Proposed Indicators for the Marine Transport VC Under "Indicators for interference with marine fisheries" Number and types of marine vessels as a result of the proposed project; Location of fisheries including access routes; Attribute data on marine uses along shipping channel (i.e. gear used in fisheries, DFO boat day data). 3. Unresolved - Changes to the dAIR required Table 7-2 Potential Adverse Effects and Proposed Indicators for the Marine Transport VC Under "Indicators for interference with recreational marine activities" Wider tourism effects will be assessed as part of the Land Resource Use VC, and referenced to interference with recreational marine activities where applicable. Indicators of visitor frequencies, when available and applicable. 4. Unresolved - changes to the dAIR required - RE: section 7.3.1 Marine transportation and scoping rationale -this section is confusing, indicates potential issues include the effects of project-related vessel traffic on Aboriginal marine users. If this is the case, please include a sub-component/indicator in table 7-2 as TC recommends. If else provide clarity that this issue will be assessed in Section 17 (see below wording) (Last sentence first paragraph) Potential impacts from project-related vessel traffic during construction, operation and decommissioning on current marine Aboriginal uses for traditional purposes will be assessed assessed in Section 17 Aboriginal Interests, including a detailed analysis of Marine aboriginal use activities/destinations/access routes overlapping with proposed Project and marine access route. -update Section 17 accordingly	
66	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	133	There are three main components to navigation under the NPA review: Commercial (including fishing), Recreational, and Aboriginal for traditional purposes. Commercial and Recreational navigation appear to be addressed in table 7-2 respectively. However, there is no clear heading for Aboriginal uses for navigation. This information is required in order to meet the requirements of the NPA and to ensure that TC's Duty to Consult, with respect to navigation, has been met. TC has provided their preferences for Table 7-2 in the comment above; however if these are not heeded, TC would recommend the proponent specify whether any traditional or current Aboriginal uses of the water body for navigation are identified or not and if so, to describe them.	Marine Transport	Yes	Application Review	If available, this information will be provided in the EAC application. Aboriginal marine use will be addressed in Part C Aboriginal Groups Information and Requirements.	Unresolved - changes to the dAIR required - RE: section 7.3.1 Marine transportation and scoping rationale -this section is confusing, indicates potential issues include the effects of project-related vessel traffic on Aboriginal marine users. If this is the case, please include a sub-component/indicator in table 7-2 as TC recommends. If else provide clarity that this issue will be assessed in Section 17 (see below wording) (Last sentence first paragraph) Potential impacts from project-related vessel traffic during construction and operation on current marine Aboriginal uses for traditional purposes will be assessed assessed in Section 17 Aboriginal Interests, including a detailed analysis of Marine aboriginal use activities/destinations/access routes overlapping with proposed Project and marine access route. -update Section 17 accordingly	

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67	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	7.3.2	For the last paragraph of this section where baseline or existing conditions are discussed, TC offers the following recommendations in terms of information to be collected and used to determine project effects: <ul style="list-style-type: none"> • Identification of volumes, types and capacity of marine traffic in the area and impacts on such (in Potential Impacts Section). • Bathymetric surveys of the marine areas, navigational channels and any sediment disposal sites. • Anchorage areas to be used. • Capital and maintenance dredging work, specifying the nature and volume of sediment, dredging methods (type of dredge, duration, frequency, etc.), surface area of the areas to be dredged, sediment management (land and aquatic) provisions, and sediment disposal area (if necessary), and navigation activities in Canadian waters (number and frequency of trips). • Ballast water management. • Describe how and for how long information was collected and from what sources in relation to current and traditional navigation uses. • Describe any recreational uses of natural waters (i.e., swimming, canoeing, fishing). • Describe existing commercial navigational usages including movement patterns of fishing vessels. <ul style="list-style-type: none"> • Provide information on current, historic and/or potential usage of all waterways and water bodies that will be directly affected by the project, including current Aboriginal uses, where available. • Propose to provide information including type, size and frequency on all types of navigation using areas in the vicinity of marine routes. • Identify and describe mitigation for vessel traffic likely impacted by the construction and operation of the physical works associated with this project. 	Marine Transport	No Yes	Application Review and OGC Permitting	<p>Advised. The following items will be included in the marine transport chapter:</p> <ul style="list-style-type: none"> - Identify volumes, types of marine traffic in the area and impacts on such - Describe how and for how long information was collected and from what sources in relation to current and traditional navigation uses. - Describe any recreational uses of natural waters (i.e., swimming, canoeing, fishing). - Describe existing commercial navigational usages including movement patterns of fishing vessels (movement patterns will be limited to general indication of use areas) - Provide information on current, historic and/or potential usage of all waterways and water bodies that will be directly affected by the project, including current Aboriginal uses, where available (historic uses will be limited to data for the last 3 to 5 years. Aboriginal marine use will be addressed in Part C Aboriginal Groups Information and Requirements). - Provide information including type, size and frequency on all types of navigation using areas in the vicinity of marine routes. <p>Identify and describe mitigation for vessel traffic likely impacted by the construction and operation of the Project works. Limited to general mitigation. Navigational risk mitigation will be addressed in the Navigational Risk Assessment.</p> <p>The following items fall outside of the scope of the Marine Transportation Chapter but may be included in the Navigational Risk Assessment (TERMPOL):</p> <ul style="list-style-type: none"> - Information on the capacity of navigational channels - Bathymetric survey data - Anchorage areas to be used - Ballast water management - Movement patterns to fishing vessels will be limited - Navigational risk mitigation 	<p>Resolved to EAO's satisfaction - for proponent's information</p> <p>What is meant by movement patterns to fishing vessels will be limited? The data on fishing vessel movement is limited?</p> <p>Is there no bathymetric data available for Howe Sound?</p>	
68	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	p.130	The dAIR references "Control Zones". a. Please specify under which Act or Regulation the Proponent intends to make application for this proposed zone, in the Marine Transportation Section of the dAIR. b. Please specify how the proponent intends to manage this zone (barriers, buoys, etc.). What will the construction/operation zone look like? (how far along the foreshore / seaward will it go). c. This information is required to ensure that there is no contravention of the Navigation Protection Act by unlawfully restricting the public right to navigation.	Marine Transport	No Yes	Application Review and OGC Permitting	<p>Additional information regarding the control zone will be included in Section 2.2.6 (Project Activities) of the EAC application.</p> <p>(a) The control zone will be established and maintained around the facility in accordance with CSA 2246.1, which will be reviewed with the OGC Facility Application.</p> <p>(b) The requirements for managing the control zone are currently being evaluated and additional information will be provided in the EA. At this time, WNLNG foresees using a combination of markers and patrol vessels. The following statement has been added to Section 2.2.6.2 of the dAIR (changes in red):</p> <p>(c) Following issuance of the EA certificate, WNLNG will apply for a permit under the Navigation Protection Act.</p>	<p>Unresolved - changes to the dAIR required -</p> <p>Section 2.2.6.2</p> <p>• Patrolling of control zones around LNG facility, FSO and moored LNG carriers; The Application will include a description of the control zone, and methods of control zone management.</p> <p>Include similar wording as above under the list of construction activities, 2.2.6.1, if a control zone will be applied during the construction phase.</p> <p>Could not identify any changes in red?</p>	
69	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	130, Section 7.3.1	In the first bullet the following text in red should be added to better capture the interferences to navigation "Navigable waters.... along the shipping route and within the project area". The last part should be added to reflect the marine traffic within the project activity zone. Another bullet should be added to this first group of bullets recognizing Aboriginal marine use.	Marine Transport	Yes	Application Review	<p>Text in the revised Section 7.3 has been edited to include a reference to the Project area as well as to the marine corridor (note the marine component of Project area is part of the marine corridor).</p> <p>Aboriginal marine use will be addressed in Section 17 of the EAC Application.</p>	<p>Unresolved - could not locate the changes. Please provide explicit location where Project area is referenced with respect to marine transportation VC.</p> <p>See above comments for assessment of impacts to Aboriginal marine use (comment 66).</p>	
70	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	130, Section 7.3.1	TC recommends adding the following red text to this 3rd paragraph to capture Aboriginal impacts: "There may be an interaction between... Commercial, recreational, Aboriginal, fisheries..."	Marine Transport	Yes	Application Review	<p>Section 7.3.1, Paragraph 3 has been changed to include the recommended wording (changes in red):</p> <p>There may be an interaction between Project-related marine traffic for construction and operation and existing commercial, recreational and Aboriginal fisheries and passenger ferry traffic in Howe Sound.</p>	<p>Unresolved - the change is not reflected in the June 26 version of the dAIR.</p>	
71	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	130	The Project may result in both direct and indirect effects on marine navigation however the dAIR has only included direct effects. Indirect effects on navigation (as a result of a change to the environment through project activities) are not included and should be.	Marine Transport	Yes	Application Review	<p>WNLNG confirms that the Marine Transport assessment will address direct, indirect and reduced effects as it relates to that VC.</p>	<p>Unresolved - change to the dAIR required</p> <p>The dAIR needs to indicate that both direct and indirect effects on marine transportation will be assessed.</p>	
72	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	130	The application should expand upon the rationale for the spatial boundaries and a statement stating such should be included in the dAIR.	Marine Transport	Yes No	Application Review	<p>Advised. As stated in Section 4.3 Environmental Assessment Methods, the Application will describe the rationale for establishing spatial boundaries.</p>	<p>Resolved to EAO's satisfaction.</p>	
73	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada	dAIR	132, Section 7.3.1	Check duplication of sentences in 1st, 2nd and 3rd paragraphs.	Marine Transport	Yes	N/A	<p>WNLNG appreciates the edit. Section 7.3.1 - The 3rd paragraph has been deleted to remove duplication.</p>	<p>Resolved to EAO's satisfaction.</p>	

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74	30-May-14	Paula Dussicette, Senior Environmental Officer	Transport Canada	dAIR	Marine Transportation Section	TC recommends that the following statements regarding TERMPOL should be added to the dAIR/Application, if appropriate from the proponent's perspective. "A Termpol review is a technical analysis designed to assess the risks to navigation and public safety associated with shipping and navigation. The report issued by the Termpol Review Committee at the end of the review examines the marine transportation operations in the context of the existing marine regulatory regime. The appraisal gives (federal government departments, agencies and the proponent an opportunity to address new or changing issues, concerns, or priorities related to the project's marine transportation components. Although the CEA/BC EAO do not require the Environmental Impact Statement/Application to include a discussion about TERMPOL, there are aspects of the discussions and studies carried out for the purposes of the voluntary TERMPOL process that may overlap with those topics that would also likely occur for the purposes of the environmental assessment such as those aspects pertaining to Activities and Modifications, and Effects of the Environment on the Project. Any other matters that are covered as part of the TERMPOL process will not be required for the EA. As it is efficient and practical to do so the two processes may inform each other.	Marine Transport	Yes		WNLNG acknowledges the statement that TC has written on the TERMPOL process. The text for marine transport p. 116 has been edited as shown in red. "The Application will include a description of legislation, guidelines, BMPs, and guidance documents that are relevant to the management of the Marine Transport VC and reference the participation in TERMPOL, where applicable".	Resolved to EAO's satisfaction - changes reflected in the dAIR Suggest adding the information provided by TC on TERMPOL be included as a foot note under section 7.3.1	
75	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		d) Marine Transport Valued Components: The marine transport component notes the marine transport route. These are shared by vessels (commercial and recreational) that access the SCRD, Gribble Island Local Trust and Town of Gibsons. Thus the draft AIR should specifically refer to consulting, gathering information about and identifying potential impacts on these areas. As with the Sustainable Economy VC, reference is made to Howe Sound area and this section could specifically reference the SCRD, Gribble Island Local Trust and Town of Gibsons areas;	Marine Transport	No		WNLNG acknowledges this comment, however, the definition of spatial boundaries for the assessment will not be amended. As noted in Section 4.3.1 (Environmental Assessment Methods - Spatial Boundaries): The Application will describe the spatial boundaries that encompass the geographic extent of measurable, potential environmental, economic, social, heritage and health effects of the Project. Boundaries have been chosen to encompass cause-and-effect relationships.	Resolved to EAO's satisfaction.	
76	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		e) Full range of potential impact of wake from Liquid Natural Gas (LNG) tankers on shorelines should be investigated in addition to potential heritage/archaeology impacts;	Marine Transport	No		LNG carriers from the Project will transit in accordance with the Canada Shipping Act (2001) and by-laws established by Transport Canada and the PPA. Similar to other large vessels, the LNG carriers will be required to comply with speed limits.	Resolved to EAO's satisfaction.	
77	22-May-14	Malissa Smith, Land Officer	FLNR	dAIR	General Comment	As per Land Policy - a Security is required and to hold by the Crown at an amount that is commensurate with the level of risk of the activity to the Crown. A four-step Risk Assessment Procedure is available to determine this cost (see Appendix A of Tenure Administration Land Procedure - available online). Part of the procedure requires understanding the presence of hazardous materials and contaminants. As follows, prior to transfer of the water lot lease and prior to issuance of any other new Tenure agreement, the client(s) must conduct a Contaminated Sites Assessment to that the existing hazards and contaminants associated with the water lots are clearly understood by the Crown and by the applicant, Woodfibre LNG.	Land and Resource Use	No	yes (Application Review and OGC Permitting)	the current owner of the land (Western Forest Products) has committed to obtaining a Certificate of Compliance (COC) prior to sale of the land to WNLNG. The conditions and monitoring requirements of the COC will be assumed by WNLNG.	Resolved to EAO's satisfaction.	
78	22-May-14	Malissa Smith, Land Officer	FLNR	dAIR	General Comment	The Lands Section is only reviewing Crown Land Authorization requirements on unencumbered Crown Land associated with the proposed water lots. If unencumbered Crown Land is part of the upland portion of the Woodfibre LNG application - please resubmit a request for review to the Lands Section that specifies these upland locations.	Land and Resource Use	no	No	A small portion of upland Crown land is now anticipated to be required for the Project. The updated Project area in the revised dAIR reflects this requirement.	Unresolved - resubmit a request for review to the Lands Section that specifies these upland locations, as requested by FLNR. Out of scope of the EA.	
79	22-May-14	Malissa Smith, Land Officer	FLNR	VC	Land and Resource Use	The proposed water lot overlaps with the following Crown Land Tenures: - File 0044927 - Industrial Lease - held by WESTERN FOREST PRODUCTS INC - for the purpose of general log handling (log dumping, storage, sorting and related improvements), wharf, barge and boat moorage, facilities incidental to the dismantling and clean-up of a pulp mill and boat works for the dismantling and conversion of a BC Ferry to a barge. - File #2410826 - Waterpower - Investment Licence - held by 0950568 BC LTD (Licence area extends into water/fresh area) Western Forest Products is to assign the Lease (0044927) to Woodfibre LNG, as they are now the upland owners. Woodfibre LNG will be required to change the purpose statement in the existing WFP Lease to clarify the new purpose and use of the land (i.e., purpose as proposed by Woodfibre LNG). Specifically to be excluded from the updated purpose statement is the purpose of "boat works and dismantling and conversion of a BC Ferry to a barge." The existing waterpower tenure holder must be consulted with to determine if the Woodfibre LNG application is an appropriate / compatible use in the water lot area.	Land and Resource Use	no	Permitting Requirements OGC	WNLNG acknowledges that there is an existing investigative Licence. As part of the OGC and OGCs Commission (OGC) permitting process, WNLNG will work with the OGC to ensure that the Project is compatible with all existing Crown Land tenures.	Resolved to EAO's satisfaction - out of scope of the EA	

Woodfibre LNG Project – Draft VC Selection/ Draft AIR Working Group Comment Tracking Table

Date: May 27, 2014
File:
Revision:

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80	22-May-14	Malissa Smith, Land Officer	FLNR	VC	Land and Resource Use	The proposal overlaps with a Section 15 Land Act Order in Council Reserve. This map reserve is held for the specific purpose of a public ferry terminal. No Land Act activity is permitted to overlap a Section 15 Reserve. Therefore, Woodfibre LNG and the OGC have two potential options to move forward: 1. Exclude the Section 15 Reserve area from Tenure Application area 2. Cancel the existing Section 15 Reserve – a process which can only take place by either: a. Amending the Section 15 Reserve – Cabinet/ Lieutenant Governor in Council decision b. Apply for a new Order in Council that requests to cancel the existing Section 15 Reserve – application goes to Cabinet/ Lieutenant Governor in Council decision Note: only federal and provincial agencies / ministries can initiate a Reserve and / or the cancellation thereof.	Land and Resource Use	Maybe No	Permitting Requirement	WLNG acknowledges this comment, and is currently examining the best approach to pursue option 2.	Resolved to EAO's satisfaction – out of scope of the EA	
81	22-May-14	Malissa Smith, Land Officer	FLNR	VC	Land and Resource Use	The proposed projects are located along the foreshore and may front private upland property. Based on initial review, the upland owner is the Applicant. As such there are no anticipated conflicts that would infringe on the upland owners riparian rights. If however, the upland owner is not the applicant – consent must be granted by the appropriate upland owner in order to venture the foreshore.	Land and Resource Use	no No	No	FLNRO is correct that the upland owner will be WLNG.	Resolved to EAO's satisfaction – out of scope of the EA	
82	26-May-14	Yota Hazianoniu, Regional Environmental Assessment Coordinator	Health Canada	dAIR	Section 7.4.2 (pp. 133-134)	HC suggests that the "Land and Resource Use" VC also cross-references baseline information from available Traditional Land Use Studies to incorporate Aboriginal uses of the Project area, where appropriate to do so.	Land and Resource Use	yes No	Application Review	WLNG confirms that any available Traditional Land Use studies will be cross-referenced as appropriate, as indicated in Section 7.4.1. The Application will include a description of legislation, guidelines, BMPs, and guidance documents that are relevant to the management of the Land and Resource Use VC. If available, the Application will also describe how TK (traditional knowledge) and TU (traditional use) information, as obtained through consultation with Aboriginal groups and other sources were used in the assessment.	Resolved to EAO's satisfaction.	
83	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR – Sea to Sky Natural Resource District	dAIR	Page 41, Table 4-5	Forestry Activities – note that the proposed development area is within the Lower Squamish Landscape Unit, not the Howe Landscape Unit.	Land and Resource Use	yes No		WLNG acknowledges this change and has amended Table 4-5 as follows [changes in red]: The Howe-Landscape Lower Squamish Landscape Unit (sew- Lower Squamish Landscape Unit) contains several forms of forest tenures including: woodlots and forest and timber licences.	Resolved to EAO's satisfaction – changes reflected in the dAIR	
84	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR – Sea to Sky Natural Resource District	dAIR	Page 114, 5 7.4.3	Consider the potential mitigation for outdoor recreation impacted activities, may include: a) allowances for public access to the ferry for recreational purposes, and b) providing a safe planned route through the development to accommodate through traffic to access recreation opportunities.	Land and Resource Use	yes No		WLNG confirms that those mitigation measures will be considered, subject to the safety requirements.	Resolved to EAO's satisfaction.	
85	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR – Sea to Sky Natural Resource District	dAIR	Table 7-3	Potential adverse effects on linear infrastructure may be indicated by the levels of forest harvesting. In addition to how those harvesting levels are scheduled during LNG construction. Coordinating these activities may best be addressed by a road use agreement for the road permit between all road users.	Land and Resource Use	yes No	Permitting Requirement	WLNG acknowledges this comment. The Land and Resource Use VC includes a forestry sub-component.	Resolved to EAO's satisfaction.	
86	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR – Sea to Sky Natural Resource District	VC	Appendix A	Suggest that Forest Health be added as a valued component (Environment)	Land and Resource Use	No		WLNG appreciates the suggestion, however, 'Forest health' will not be included as a VC. Part of the process of selecting VCs was to minimize redundancy and duplication. Although forest health was not included in the candidate list of VCs, native vegetation is considered as part of the Vegetation Component VC. We believe that this is appropriate given the minimal amount of clearing associated with the Project.	Resolved to EAO's satisfaction.	
87	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR – Sea to Sky Natural Resource District	VC	Appendix A	Suggest that Wildfire be added as a valued component (Environment)	Land and Resource Use	No		WLNG appreciates the suggestion, however 'wildfire' will not be included as a valued component. Wildfire will be considered in Section 1D [Effects of the Environment on the Project].	Unresolved - Section 12.6 is effects of the environment on the project	
88	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada (TC)	dAIR	General	TC notes that there is no mention of any impacts associated with the proposed flare stack on air navigation. Views Sound may have VFR floatplane and helicopter traffic. The flare stack must be assessed for marking and lighting under the Canadian Aviation Regulations (CAR) 602. The information on the location, height and characteristics of the obstacle as well as the lighting and marking will probably have to be published in the Aeronautical Information Publications as appropriate. Impacts to air navigation should be captured in the dAIR. In addition the height may have some impact on NavCanada's procedures. They should be contacted and provided information on the location, height and characteristics of the obstacle. They can be contacted and the information provided through the process described on their website at: http://www.navcanada.ca/en/products-and-services/Pages/land-use-program.aspx	Land and Resource Use	Yes No	Application Review	WLNG acknowledges this comment and will include consideration of air navigation in the transportation portion of Community Infrastructure and Services sub-component. WLNG commits to following the appropriate permitting procedures. Through NavCanada we will register any new structures using the Land Use Submission Form to mitigate possible effects to air traffic. The Proponent will also be registering in the Accountable Source System (ACS) for Transport Canada.	Unresolved - changes to the dAIR required - Provide a statement in the dAIR to reflect this commitment.	

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89	2-Jun-14	Russell Inouye, Fire Chief	Squamish Fire Rescue	VC	7.4.3 Potential Interaction of the project and proposed mitigation	The form and structure of the buildings and floating structures including the surrounding support structures will impact the tourism and outdoor recreation viewscape. These issues should be addressed including potential mitigation factors.	Visual Quality	No		Section 7.3 - Visual Quality will address potential Project Interactions with the Visual Quality VC and proposed mitigation. The objective of the visual assessment is to identify and determine potential Project-related visual effects and aesthetics in comparison to the existing visual baseline conditions. The assessment will identify and evaluate potential adverse effects of all phases of the Project on the Visual Quality VC.	Resolved to SAO's satisfaction.	
90	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	dAIR	5.7.5, p.117	Visual Quality is also an intermediate component of the "Land and Resource Use" VC, based on the requirement for forestry operations (cut blocks and roads) to manage for scenic Objectives established by the Government Actions, Regulation (GAR). The Sea to Sky Natural Resource District is currently initiating a project to review and update the scenic area and visual quality objectives for the corridor. This process will also update viewpoints, and include viewpoint(s) in the Sea to Sky Gondola location. Correction: Objectives and strategies for managing visual quality are not located in resource management plans or landscape unit plans. Forestry tenure holders must include objectives in Forest Stewardship Plans.	Visual Quality	yes No		Our understanding is that addressing visual quality objectives is a legal requirement for Forestry Stewardship Plans, but does not pertain to other resource use. Visual quality objectives are often included in regional plans, and will be considered in our assessment.	Unresolved - will the Application include a reference to the draft Visual Quality objectives for the Sea to Sky Natural Resource District, if available? If so add this commitment to the dAIR, if not provide a rationale why.	
91	30-May-14	Frank DeGagne, Land & Resource Specialist	FLNR - Sea to Sky Natural Resource District	dAIR	5.7.5.2 p.128	Existing conditions. Correction: For FLNR the official district office name has changed to 'Sea to Sky Natural Resource District' - not Squamish District, could be confused with the municipality/District of Squamish (DOS).	Visual Quality	yes		WNLG has noted the change to the district office name (changes in red): Section 7.5.2 - Bullet 1 • Desktop review of existing information including available local plans, policy documents, aerial photographs, maps and topographical surveys. The visual resources for the Project area have been established and made available through the current approved British Columbia Visual Landscape Inventory spatial and tabular data (MOF 1997), with ongoing amendments through the Squamish District Office Sea to Sky Natural Resource District and WNLG.	Resolved to SAO's satisfaction - changes reflected in the dAIR.	
92	25-May-14	Yota Hatziantoniou, Regional Environmental Assessment Coordinator	Health Canada	VC dAIR	VC Table 1 (pg. 15), Appendix A (pg. 5) & dAIR, Table 4.1 (pg. 29)	HC prefers that the "Public Health" VC be restyled "Human Health" VC, so that it is inclusive of both public and Aboriginal health considerations.	Public Health	yes	Application Review	Woodfibre does not intend to exclude aboriginal health by using "Public Health" as the VC name. Aboriginal health factors will be included. The term Public Health is used because the EA will include a type of Human Health Risk Assessment (HHRA). The HHRA will include some socio-economic indicators in addition to the risk calculations.	Unresolved - Changes to the dAIR required - Clearly define what WNLG means by "public health" in the dAIR (inclusive of Aboriginal health), or change to human health as recommended by HC.	
93	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environmental Protection, Oil & Gas/LNG Team	VC	Appendix A, pg. 1	Comparison of predicted ambient air concentrations to the MOE recommended guidelines, including the health-based guidelines from the WHO and the US EPA. A Human Health Risk Assessment where predicted emissions will be compared with these guidelines is necessary. If the predicted concentrations are higher than published thresholds, or have a concentration ratio >1, then the risk to human health (quantitative risk assessment) must be assessed through dose-response curves or equivalent. It will be important to understand the predicted combined effects of SO2 and NO2 on human health, important elements: • which CACs will be assessed • exposure time interval to be assessed (1 hr avg/10 min avg/annual avg) • comparisons of ambient air concentrations to guidelines beyond provincial and federal to include WHO and the US EPA • quantitative risk assessment if guidelines are exceeded (using dose-response relationships) JF	Public Health	yes	Application Review	A Human Health Risk Assessment based on predicted emissions will be conducted if predicted concentrations exceed air quality guidelines and this will be determined in the problem formulation stage of the risk assessment. Cumulative effects of substances acting on the same toxicological endpoints will also be included based on the results of the problem formulation. Contaminants identified in the air quality emissions inventory (likely CACs and VOCs) will be assessed. Exposure periods are typically 1-hr, 24-h and annual but some of the shorter exposure durations vary slightly by chemical so they will be matched by air quality standard (i.e., 10 minutes or eight hr). A variety of health based air quality criteria will be used for screening purposes - WHO and USEPA can be included in the screening.	Unresolved - Changes to the dAIR required - Section 9.2.1 Public Health Scoping and Rationale (third paragraph) The Application will include a description of legislation, guidelines, BMPs, and guidance documents that are relevant to the management of the Public Health VC, including the health-based guidelines from the WHO and US EPA. Table 9-1: Potential Adverse Effects and Proposed Indicators for the Public Health VC (under "Indicators") • Human health risk assessment will follow Health Canada Guidance on risk assessment. Risk estimates will be compared to acceptable risk levels determined by Health Canada and the MOE including WHO and US EPA ambient air concentration guidelines for NO2 and SO2. If the predicted concentrations are higher than published thresholds, or have a concentration ratio >1, then the risk to human health (quantitative risk assessment) must be assessed through dose-response curves or equivalent (including dose-response data to assess the potential for acute and chronic health risks of sensitive receptors). An 1 hr avg/10min/annual avg exposure time interval will be assessed. The risk assessment will also include predicted combined effects of SO2 and NO2 (respiratory irritants) and other contaminants that have the same mode of action and/or target organ or tissue. (WNLG verify if this wording satisfies MoE/HC/WHO).	

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94	27-May-14	James Li and Paul Harriott, Ministry Health Officers	Vancouver Coastal Health (VCH)	<p>VC-dAIR-page 25</p> <p>The Valued Component identified under the Health Pillar is concerned only with assessing effects to human health from the changes in the physical environment that might occur from this project (e.g. air, water, ambient light and noise). Human health is also determined by other factors such as employment, housing, recreational opportunities, and social networks/sense of community belonging. Most of the missing health determinants are listed under one or more of the other Pillars as valued components. However to fully assess the Health Pillar, there needs to be explicit cross linkages to the Health Pillar. There is no need to duplicate the work but the fact that these other VCs feed into the Health Pillar has to be articulated in a transparent way.</p> <p>Recommendation: Have two valued components (VCs) under the Health Pillar with these sub-components: 1. Population Health • subVC: Population Health Status and Demographics - Population health status indicators are not listed in the dAIR or the dVC as information the proponent plans to gather and analyse. Background data on population health for the community is required before one can even begin assessing the possible impacts of the project to the community.</p> <p>• Population health data should be compiled and compared for the Local Study Area, the Regional Study Area and the Province. The health data should be included as part of the Health Pillar indicators. Data elements should include: o Demographic and Socioeconomic status o Life expectancy, age, gender, and cause (including injury) specific mortality and morbidity rates, and prevalence of chronic disease o Prevalence of healthy/unhealthy life styles (smoking rates, physical activity level, nutrition, community belonging, etc.)</p> <p>• subVC: Labour Market and Sustainable Economy - Cross link to the VCs in the Economic Pillar. Please add indicator(s) to capture the proportion of the projected workforce during construction and operation phases that will be hired from the Local Study Area residents, as well as projected immigration into the Local Study Area.</p> <p>• subVC: Infrastructure and Community Services, Land and Resource Use - Cross link to the VCs in the Social Pillar. This would capture issues that could affect population health such as impacts to housing cost and availability, demand for community and educational services, demands for emergency services. In addition impacts to recreational use within the Howe Sound shorelines and waters (Appropriate benchmarks include the Health Canada Guidelines for Recreational Water Quality including secondary exposures such as from fish and shellfish harvesting and consumption. Also of relevance is the Howe Sound Water Quality Guidelines (from MoE). Given the existing level of waste discharges into Howe Sound from industrial, commercial and residential activities, a cumulative impacts analysis should be considered. An inventory of existing human activities in the Howe Sound area should be included in the dAIR. For example, to adequately assess the potential impacts to recreational activities, all bathing beaches, recreation and seasonal camps will need to be identified. The location of summer camps should be indicated on Figure 4-26 (PMAA).</p> <p>• subVC: Visual Quality - Changes in scenic values has an affect on quality of life. The WHO European Charter on Environment and Health, 1989, states that "good health and well-being require a clean and harmonious environment in which ... aesthetic factors are given their due importance."</p> <p>• subVC: Marine Transportation - Proponent needs to assess impact on marine traffic related accidents (collision, grounding) leading to injuries. Assessments should not be limited to the shipping route and Dornell Bay Ferry but also consider accident and injury impacts within the entire recreational and commercial water activity areas. The outdoor recreation regional assessment area Figure 4-23 should be expanded to include Nexen Beach, Cattermole slough and Squamish Marina, the area around the Kite Surf Spit (and perhaps other marinas such as MS Bay?).</p>	Public Health	yes	Population health, labour market and sustainability, economy, infrastructure community services, land resource use and visual quality analyses will be presented as part of the socio-economics and a summary of the detailed analyses and linkages to public health will be provided in the public health section.	Unresolved - changes to the dAIR Required - Section 9.2.3 (last paragraph). The Application will include a description of legislation, guidelines, BMPs, and guidance documents that are relevant to the management of the Public Health VC. Population health, labour market and sustainability, economy, infrastructure community services, land resource use and visual quality analyses will be presented as part of the socio-economics and a summary of the detailed analyses and linkages to public health will be provided in the public health section. If available, the Application will also describe how TX and TJ information, as obtained through consultation with Aboriginal groups and other sources, were used in the assessment. (WGNL verify if the wording satisfies MeE/HQ/VCH). -Community health and wellbeing has been added as a sub-component of the public health VC. -Provide more specific responses to the recommendations.	

Comment ID	Date Submitted	Submitter Name and Title	Agency/Association/Location	Comment relevant to Draft VC or dAIR?	Relevant section and table number	Comment/Issue Description/Requested Changes	Category/Theme	Change to the Draft VC/ dAIR/ dAA required?	Application Review and/or Permitting Requirement?	Proposer's Response	EAO's Assessment of Response	Proposer's follow-up response/action
93	27-May-14	James Lu and Paul Martineau, Ministry Health Officers	Vancouver Coastal Health	VC dAIR	VC-page 15 2. Public Health	<p>• Add a subVC: Water Systems – Proponent needs to include an assessment of existing potable and non-potable water systems as defined by the Drinking Water Protection Act (or compliance with the Act and in comparison with the water quality standards established by the Guidelines for Canadian Drinking Water Quality) and any other relevant legislation or Best Management Practice Guidelines. New proposed water supply systems or upgrades to existing ones require a Construction Permit in advance from the Health Authority. Water system assessments must consider contamination site studies and activities and include protective measures for all proposed potable water sources (surface, ground or marine) [Comment applies to water systems located in temporal boundaries].</p> <p>• Written confirmation that there are no domestic water licences/private water systems located within the Woodfibre and Mill Creek watersheds</p> <p>• Add a subVC: Liquid Waste Management – "A filling" will be required for any alterations or new construction of on-site sewerage disposal systems that are subject to the BC Sewerage System Regulation. Also, written confirmation that all other proposed and existing liquid waste water systems including industrial, domestic, and storm and runoff water systems and ocean outfalls comply with the BC Waste Water Regulations permitting requirements, and any other relevant legislation and area guidelines, i.e. the Howe Sound Water Quality Guidelines (MDE).</p> <p>It is unknown how the proponent plans to manage waste discharge from vessels. Ideally shore sewerage services would be provided to vessels while in dock, if vessel waste discharge into Howe Sound is to be part of the standard operating procedure, the potential effect of the waste discharge on nearby summer camps and recreational waters must be addressed.</p>	Public Health	Yes	Permitting Requirement	<p>All requested information is already considered elsewhere within the EAC application and will be cross-referenced as appropriate.</p> <p>Water systems is already presented under the Surface Water Quantity/Quality VC – the public health assessment is related to the effects of changes to water quality on people's health. Thus, a sub-component for Water Systems is not deemed applicable.</p> <p>Sewage disposal is currently permitted to discharge into Howe Sound. A new treatment plant will be constructed as part of the Project and permitted as required following issuance of an EAC. Any effects to marine water quality will be considered in Section 5.10 of the EAC application. Thus, inclusion of a Liquid Waste Management sub-component to Public Health is not deemed applicable.</p> <p>Air Quality is already a VC under the air quality assessment – the public health assessment is related to the effects of air quality on people's health. Thus, a sub-component for air quality is not deemed applicable.</p>	Unresolved – changes to the dAIR required –	Add more clarity (as directed above) to the dAIR to indicate how air quality and water quality/quantity will link to the public health VC. See comment 116 for EAO advice to include a pathway of effects diagram
			VC	Table 1, pg. 10	<p>• Add a subVC: Air Quality – Air criteria as shown under Table 1 should also include H2S and ozone (this omission was noted by the Health Canada rep on the working group). VC should refer to the Howe Sound Air Shed Management Plan goals and objectives in addition to provincial and federal regulations and BNP guidelines. The choice to use existing hydro power as the primary supply versus natural gas and the potential for the provision of shore power to marine vessels supports the air protection goals of the Air Shed Management Plan.</p> <p>It is not clear from the indicators and rationale for the draft Public Health VC whether the potential air quality effects on human health will be adequately assessed. It is not sufficient to simply compare the air dispersion model outputs to existing AQ objectives. The model outputs needs to be inputs into available exposure-response functions and health effects calculated in terms of mortality and morbidity (e.g. for Criteria Air Contaminants, VOC, H2S CO, Ozone, and PM).</p>							
96	27-May-14	James Lu and Paul Martineau, Ministry Health Officers	Vancouver Coastal Health	VC	Map 4-20	<p>3. Emergency Response</p> <p>• Emergency services, mitigation and response plans must be established in conjunction with local, regional, provincial and federal government services and emergency operations staff. The emergency services assessment area map 4-20 is limited to the project site and shipping routes only. This should be expanded to include the communities in Howe Sound, as well as the entire shipping route to and from the Pacific Ocean open water.</p> <p>• Request that an emergency management plan is developed and included in the AIR. This plan should include details regarding spills (both on land and water) of oil, gas, mercury and other hazardous material spills, emergency power loss and flare-ups, facility fire or explosions, LNG emissions, transportation accidents, etc.</p> <p>• A Transport Canada TERMPOL (Technical Review Process of Marine Terminals and Transshipment Sites) review should be required for the project to assess the navigational risks associated with the proposal. Results of the review should be part of AIR.</p>	Emergency Response	No		<p>The Application Information Requirements (AIR) is a document that identifies the information that WNLG is required to provide in the EAC application. WNLG assumes that VCH is requesting the information be included in the EAC application and not the AIR.</p> <p>WNLG agrees that emergency services response must be coordinated between all levels of government services. However, an assessment of the entire shipping route is outside of the scope of the EA. Established shipping routes are regulated under separate legislation. LNG carriers used for the Project will transit in accordance with the Canada Shipping Act (2001) and by-laws established by Transport Canada and the Pacific Pilotage Authority (PPA).</p> <p>The EA document will include a list of potential accidents and malfunctions (Section 11) as well as specific Environmental Management Plans (Section 13). Detailed emergency response plans are outside of the scope of the EA, and will be developed at the permitting stage of the Project.</p> <p>A TERMPOL review will be conducted for the Project; however, the TERMPOL assessment will not be completed until after the Project has applied for the EA certificate.</p>	Unresolved – further information required –	Indicate who is the responsible agency for approval of detailed emergency response plans during permitting.
97	2-Jun-14	Kimberly Neesham, Director of Planning and Development	Squamish-Lillooet Regional District	dAIR		Should take into consideration psychological impacts within the LAA (20x20km) and RAA (50x40km). Should also include more than just those spending time at/on the site or recreational users nearby, but those permanent residents in the Howe Sound.	Public Health	Yes	Application Review	The Public Health VC has been amended to include a community health and well-being sub-component. This section will consider determinants and parameters of community health and wellbeing, including income, alcohol and drug abuse, crime, community connectedness, and stress.	Resolved to EAO's satisfaction.	The LAA and RAA include District of Squamish, Electoral Area D of the SRD, RMDW, and Squamish First Nation communities.

Woodfibre LNG Project – Draft VC Selection/ Draft AIR Working Group Comment Tracking Table

Date: May 27, 2014
File:
Revised:

Comment ID	Date Submitted	Submitter name and title	Agency/Ministry	Comment relevant to Draft VC Selection or dAIR	Relevant section and page number	Comment/Issue Description/Proposed Change	Category/Theme	Change to the draft VC selection/dAIR	Application Review and/or Permitting	Proposed Response	CAC/Assessment of Response	Proposed Follow-up Response/Action
98	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 59, Section 5.9	The proponent should be aware that some of the BC/Canadian ambient guidelines/objectives (SO2 and NO2) are not to be used in the determination of any health effects. The proponent should contact the LNG Air Quality Specialist (warren.mccormick@gov.bc.ca) as soon as possible to discuss the dispersion modelling plan. The modelling plan should include CACs (as listed in Table 5.8) as well as any CEPA NHPS substances that may be reportable during operations. The proponent should also quantify the loss of any working fluids during operation. The proponent should also quantify the mass emissions of CACs from all construction activities. The effects assessment during operation should also include upset and emergency situations. The associated shipping activities should include tanker and tug travel throughout the RAA and at berth. WHM	Public Health, Atmospheric, Environment (Air Quality)	Yes No	Application Review	The MoE will be consulted as early as possible in the modelling process. This will include provision of a conceptual and detailed model plan for MoE consideration and review. This approach is consistent with the BC MoE Air Dispersion Modelling Guidelines (2008). The model plans will detail the air emissions that will be quantified and assessed based on Project specific engineering data. The effects assessment for the operational phase will include consideration of emergency scenarios. The effects assessment will include consideration of all Project phases and emissions from shipping activities associated with the Project. The air quality risk assessment conducted as part of the public health assessment will be based on the use of health based air quality thresholds and thresholds from local, Canadian and international jurisdictions will be compared and a rationale will be provided for selection of environmental screening criteria.	Unresolved - further information required - Provide an update on the status of the air modelling analysis, and append meeting summaries if applicable.	
99	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 125, Section 9.0	The Human Health Risk Assessment should follow Health Canada Guidance Documents on HHRA, MoH	Public Health	Yes No	Application Review	The human health risk assessment will follow Health Canada Guidance documents for risk assessment.	Unresolved - changes to the dAIR required - Table 9-1: Potential Adverse Effects and Proposed Indicators for the Public Health VC (under "Indicators") • Human health risk assessment will follow Health Canada Guidance on risk assessment and risk estimates will be compared to acceptable risk levels determined by Health Canada and the MOE, including WHO and US EPA ambient air concentration guidelines for NO2 and SO2. If the predicted concentrations are higher than published thresholds or have a concentration ratio >1, then the risk to human health (quantitative risk assessment) must be assessed through dose-response curves or equivalent (including dose-response data to assess the potential for acute and chronic health risks of sensitive receptors). An 1 hr avg/10min/annual avg exposure time interval will be assessed. The risk assessment will also include predicted combined effects of SO2 and NO2 (respiratory irritants) and other contaminants that have the same mode of action and/or target organ or tissue. (WNGC to determine if this wording satisfies MoE/HCC/VCH)	
100	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 125, Section 9.0	The Application should provide the complete HHRA report as a technical appendix, following a standard HHRA framework as per Health Canada guidance, i.e. Problem Formulation, Exposure Assessment, Toxicity Assessment, Risk Characterization, MoH	Public Health	No	Application Review	The human health risk assessment will follow Health Canada Guidance documents for risk assessment and will be presented as technical appendix as requested.	Unresolved - changes to the dAIR required - Section 9.2.1: Public Health Scoping and Rationale (end of first paragraph) ...health and well-being. The complete human health risk assessment report will be appended to the Application, following standard HHRA framework as per Health Canada guidance, i.e. Problem Formulation, Exposure Assessment, Toxicity Assessment, Risk Characterization. A rationale will also be provided for those exposure pathways that are excluded from further assessment.	
101	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 126, Table 9-1	Where objectives or standards are not available or sufficiently protective of human health, the assessment should refer to other jurisdictions (e.g. USEPA, WHO). Note that the current BC AAQDs for SO2 and NO2 are not considered sufficiently protective of human health. MoH	Public Health	No	Application Review	Please see response to comments 93 and 116.	Unresolved - changes to the dAIR required - see comment 93.	
102	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 126, Section 9.2.3	The HHRA should consider the effect of chemical mixtures as per Health Canada HHRA guidance. Where applicable, risk estimates may be summed for chemicals with similar mode of action and/or same target organ or tissue. For example, risk estimates for NO2 and SO2 are commonly summed, along with other chemically identified as "respiratory irritants." MoH	Public Health	No	Application Review	Please see response to comments 93 and 116.	Unresolved - changes to the dAIR required - see comment 93.	
103	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 125, Section 9.0	To support the scope of the HHRA and in accordance with Health Canada HHRA guidelines, the HHRA technical report should include a detailed conceptual model of all contaminants of potential concern, pathways of exposure, and receptors, including rationale for the inclusion or exclusion of operative and inoperative pathways. MoH	Public Health	No	Application Review	The human health risk assessment will provide a detailed conceptual model. The problem formulation section of the human health risk assessment and associated screening appendices will document the selection of contaminants of potential concern, receptors, and exposure pathways of concern. A rationale will also be provided for those exposure pathways that are excluded from further assessment. The problem formulation will be consistent with Health Canada Guidance as per responses to comments 93 and 116.	Unresolved - changes to the dAIR required - See comment 100.	
104	2-Jun-14	Kellie Leedham, on behalf of MoE and MoH, Manager, Operations	Ministry of Environment, Protection, Oil & Gas/LNG Team	dAIR	Pg 126, Table 9-1	The dAIR suggests that chemicals of potential concern will be screened against environmental quality guidelines/standards/objectives in the HHRA. Please note that some of these limits may not adequately characterize human health risk, especially in cases where they are developed based on other factors such as technological constraints, etc. Consequently, the HHRA should include analysis of dose-response data to assess the potential for acute and chronic health risks at exposure below these levels, particularly for sensitive receptors. MoH	Public Health	Yes	Application Review	Please see response to comments 93 and 116.	Unresolved - changes to the dAIR required - see comment 93.	

Comment #	Date Submitted	Submitter Name and Title	Agency/Affiliation	Comment relevant to draft VC selection or dAIR	Relevant section and page number	Comment/Issue Description/Requested Changes	Category/Theme	Change to the draft VC selection/dAIR required?	Application Review/Information Requirement?	Proponent's Response	EAO's Assessment of Response	Proponent's Follow-up Response/Action
105	24-May-14	Russell Moroye, Fire Chief	Scuzmish Fire Rescue	dAIR	p130-P130	The document should identify individual events and the mitigation measures to be undertaken during construction and operating phases. To include but not be limited to: Structure fires Wild Land fires Marine Vessel fires Marine Vessel incidents Loading dock/gas transfer fires Hazard incidents and spills Tower Crane Rescue Confined Space Rescue Floods and debris flows Earthquake and structural collapse Medical emergencies Explosion Motor Vehicle Accidents Industrial Accidents and Entanglement Rescue Ground Search and Rescue Fresh and Salt Water Rescue	Accidents and Malfunctions	No	OGC Permitting Requirement	WNLG acknowledges this comment and agrees that specific potential accidents and malfunctions are important to identify and implement mitigation measures for. Section 11 of the dAIR identifies the preliminary list of potential accidents and malfunctions that will be considered. A preliminary list of environmental management plans is included in Section 13 of the dAIR, including an Accidents and Malfunctions Management Plan. WNLG would like to note that the permitting phase for the Project will include more detailed plans for emergency response to potential accidents or malfunctions, for e.g. Tower Crane Rescue or Confined Space Rescue. The required components of the emergency response plan will be determined during detailed design phase. These response plans are not included in the EAC Application. WNLG will comply with all WorkSafe BC requirements.	Unresolved - More information required - Please identify the responsible agency that will review and approve the emergency response plans. The comment speaks to mitigation measures to reduce the potential for accidents and malfunctions. Indicate this information requirement in the dAIR or update the dAIR to include information related to the requirement for information on mitigation measures, if applicable.	
106	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada (TC)	dAIR	p137, Section 27.0	In the first three bullets TC recommend the addition of the descriptor 'proposed' to 'project'.	Aboriginal Interests	Yes	Application Review	The definition of 'Project' in Section 2.0 of the dAIR has been amended (changes in red). This section will present a description of Woodfire LNG Ltd (Proponent) as well as a Project Description for the proposed Woodfire LNG Project (Project). The new definition of the term 'Project' indicates that it is a proposed project. The use of the word 'proposed' has been amended accordingly where it appears in the dAIR.	Resolved to EAO's satisfaction	
107	30-May-14	Paula Doucette, Senior Environmental Officer	Transport Canada (TC)	dAIR	p140, Section 20	The way this section currently reads including the Table 20-1, does not clearly outline/capture key considerations (specific issues and concerns raised by Aboriginal groups, the measures proposed to mitigate those effects, the adequacy of the mitigation measures proposed, and the degree to which the issues are considered resolved or addressed by the proponent and/or other parties) and may not result in adequate records/logs. TC has the following suggested revisions for paragraph 2 (pg 140): -The application will include an Aboriginal Issues Tracking Table that summarizes the potential adverse effects of the proposed project on Aboriginal interests, the measures proposed to mitigate those effects, and the degree to which the issues are considered resolved or addressed by the proponent and/or other parties; and -An appendix that contains comments raised by Aboriginal groups in relation to the proposed project (Engagement Logs)	Aboriginal Interests	Yes No	Application Review	WNLG agrees that specific issues and concerns raised by Aboriginal groups are important to capture in a separate document. A separate Aboriginal Issues Tracking Table (in the same format as this Working Group tracking table) is being maintained to track the issues raised and mitigation measures proposed, as well as any follow-up questions or further correspondence on the issues. As part of the SA process, a separate 'Aboriginal Groups Consultation Document' is being developed that will outline the consultation process with Aboriginal groups.	Unresolved - changes to the dAIR required - EAO will follow-up with TC and WNLG, to ensure appropriate tracking of potential adverse effects of the project on Aboriginal interests, the measures proposed to mitigate those effects and the degree to which the issues are considered resolved or addressed by the proponent and/or other parties.	
108	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		(f) Public Meetings During each public consultation period, a public meeting should be arranged in the Gibsons area;	Public Consultation	No		The formal EAO public meeting locations are determined by the EAO.	EAO responded in a letter to SCRD. EAO will consider holding an open house on the Sunshine Coast (Gibsons) during public consultation on the Proponent's Application during the Application Review stage of the environmental assessment.	
109	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		(g) Additional comments may be provided by the SCRD during the public consultation period for the draft AIR;	Public Consultation	No		WNLG acknowledges this comment.	EAO will consider all public comments, comments from First Nations and the comments from the Advisory Working Group in finalizing the Application Information Requirements (AIR).	
110	30-May-14	SCRD (David Rafael, Senior Planner)	Sunshine Coast Regional District	dAIR		AND THAT the Environmental Assessment Office be requested to provide additional communication regarding public information meetings that will be held in Gibsons and area.	Public Consultation	No		Communications regarding public consultation meetings are determined by the EAO.	See above, comment 108.	
PROPOONENT-INITIATED CHANGES												

Comment ID	Date Submitted	Submitter Name and Title	Agency/Affiliation	Comments relevant to Draft VC selection or dAIR	Relevant section and page number	Comment/Issue Description / Suggested Changes	Comment/Theme	Change to the draft VC selection/dAIR required?	Application Review and/or Permitting Requirements?	Proponent's Response	EAO's Assessment of Response	Proponent's follow-up response/action
111				dAIR VC	dAIR section 5.12 Appendix A	Marbled murrelets has been removed as a subcomponent of the Avifauna VC. Marbled Murrelet was initially proposed for consideration as a VC based on anticipated management concern. Taking additional information regarding project design and siting into consideration, the potential for marbled murrelets to experience Project-related effects is now considered negligible.					Unresolved - further discussions with PLNR and CHS is required. It seems that Marbled Murrelet will be included in Marine Birds VC7. WFLNG should provide a clear rationale explaining which species at risk would be included in the assessment and which would not.	
112				dAIR VC	dAIR section 5.14 VC Appendix A	Grizzly bear has been removed as a VC. Grizzly bear was included as a VC because of its regulatory importance and our experience with other environmental assessments on Howe Sound rather than an expectation of adverse effects. Based on subsequent discussions with the Ministry of Forests, Lands and Natural Resource Operations (FLNRO) and the EAO, we do not believe that FLNRO will require grizzly bear to be included as a VC.					Resolved to EAO's satisfaction.	
113				dAIR VC	dAIR Table 4-2, section 7A.1.1 VC Table 4-2	The marine buffer for the Commercial Marine Use boundary and the Land and Resource Use Marine Based Outdoor Recreation subcomponent has been reduced from 5km to 2km.					Unresolved - please provide a rationale for the change. Further discussions with VC required.	
114				dAIR VC	Figures	Figures have been updated to reflect the most up-to-date Project layout and study and assessment boundaries. In addition, the number of figures has been reduced, as we have combined overlapping study areas for VCs into one figure, where feasible.					Resolved to EAO's satisfaction.	
115	11-Jul-14		EAO	dAIR VC	Site Contamination	Provide more clarity of what types of information will be included in the EAC Application related to site contamination, the interaction of Project activities with contaminated soils and sediments and potential impacts to ICs/VCs due to mobilization of contaminants of concern (i.e., metals, hydrocarbons, poly-aromatic hydrocarbons, dioxin, furans, other legacy contaminants identified from CoC and new contaminants, etc.). • Application should include a description of site history, site contamination (identifying contaminants of concern) and certificate of compliance as context. • Suggest renaming the "Site Contamination (IC)" to "Soils and Sediment (IC)" • The Soil and Sediment IC would include assessment of 1) terrestrial soils and 2) marine sediments. • Describe how the Soils and Sediment IC is expected to interact with other ICs/VCs such as surface water quality and marine water quality, groundwater quality, and Human Health (provide pathway of effects to identify linkages). • Include baseline of the contaminants of concern under the existing conditions sub-heading. • Compare existing baseline conditions to accepted guidelines and thresholds for soil and water quality where available (e.g. water quality guidelines). • Describe the potential interaction of the Project activities with contaminants of concern (e.g. the potential mobilization of contaminants from disruption of soils during construction) and identify the potential effects for each IC/VC identified on the effects pathway with the Soils and Sediment IC. Groundwater: Please provide a rationale for why groundwater should not be included as an IC. In your rationale describe potential project effects and interactions with any receptor VCs or ICs that may interact with groundwater quality.						
116	11-Jul-14		EAO	dAIR	List of Figures	EAO recommends the dAIR include a pathway of effects figure, that clearly depicts the interaction between ICs and VCs. This figure will help the reader understand how data from the ICs will feed into the significant determination of VCs in the EAC Application.						

Page 117 redacted for the following reason:

s.16

Mayall, Jane EAO:EX

FILE COPY

From: Smith, Alanya C EAO:EX
Sent: Thursday, July 10, 2014 9:41 AM
To: 'Byng Giraud'
Cc: 'Amanda Zinter'; Paulson, Amber EAO:EX; Mayall, Jane EAO:EX
Subject: 30050-20/WLNG-05-06 RE: Woodfibre LNG meeting

Hello Byng,

The 23rd at 10 am works for us. We will book a boardroom. Please let us know who will attend and suggest any agenda topics to discuss.

Thanks,
Alanya

-----Original Message-----

From: Byng Giraud [mailto:byng_giraud@wlng.ca]
Sent: Thursday, July 10, 2014 8:10 AM
To: Smith, Alanya C EAO:EX
Cc: Amanda Zinter; Paulson, Amber EAO:EX; Mayall, Jane EAO:EX
Subject: RE: Woodfibre LNG meeting

Alanya,

Do you mean 22nd or 23rd? If so I would like to request we meet on Wednesday the 23rd at your offices at your proposed time.

Thanks again.

Byng

-----Original Message-----

From: Smith, Alanya C EAO:EX [<mailto:Alanya.Smith@gov.bc.ca>]
Sent: Wednesday, July 09, 2014 8:57 AM
To: Byng Giraud
Cc: Amanda Zinter; Paulson, Amber EAO:EX; Mayall, Jane EAO:EX
Subject: RE: Woodfibre LNG meeting

Hello Byng,

Thank you. I am looking forward to working with you as well. I agree that it is a good idea to meet fairly soon although I'm away all next week. Are you available the following week? We could meet in Victoria on Tues or Wed between 10 - 12. Please let me know which works for your team.

Thank you,
Alanya

-----Original Message-----

From: Byng Giraud [mailto:byng_giraud@wlng.ca]
Sent: Tuesday, July 8, 2014 5:03 PM
To: Smith, Alanya C EAO:EX

Cc: Amanda Zinter; Paulson, Amber EAO:EX
Subject: Woodfibre LNG meeting

Alanya,

Welcome to the Woodfibre project. We look forward to working with you.

zz's but would like to arrange a meeting with you to bring you up to date on our approach and perspective and to provide any additional information. I think an initial meeting of the four of us would be helpful.

Perhaps sometime next week in Vancouver or Victoria? Let me know if that might work.

Thanks in advance.

Byng

VP Corporate Affairs
Woodfibre LNG
778-233-6449

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Mayall, Jane EAO:EX

From: Smith, Alanya C EAO:EX
Sent: Thursday, July 31, 2014 11:26 AM
To: Lara Taylor (ltaylor@hemmera.com); 'Byng Giraud'; 'Amanda Zinter'
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: 30050-20/WLNG-05-06 FW: For Review: Draft #2 AIR for Woodfibre LNG
Attachments: WorkingGroup_WoodfibreLNG_comments_VC_AIR_Thorogood_ArchaeologyBranchFLN RO_30July14.docx

Comments from Arch Branch.

- Note that zz's and you may want to try and touch base with her today if you have questions

Thank you

From: Thorogood, Paula FLNR:EX
Sent: Wednesday, July 30, 2014 5:22 PM
To: Smith, Alanya C EAO:EX
Cc: Mayall, Jane EAO:EX; Paulson, Amber EAO:EX
Subject: RE: For Review: Draft #2 AIR for Woodfibre LNG

Hi Alanya,

s.22

Please find attached my initial comments (n=3) for the revised dAIR. Basically, until an Archaeological Impact Assessment is complete, we will not know whether archaeological sites are located within the proposed development, nor mitigate impacts to archaeological resources.

In regards to comment 1: I looked through our records and could only find a permit 2014-0188, to conduct an "Archaeological impact assessment of FortisBC Energy Inc.'s proposed Eagle Mountain - Woodfibre Gas Pipeline Corridor running from Eagle Mountain in Coquitlam to Woodfibre, southwest of Squamish" which I don't think is the right project.

Thanks,

Paula Thorogood | Archaeologist/Heritage Resource Specialist
Archaeology Branch | Ministry of Forests, Lands and Natural Resource Operations
 Phone: 250-953-3300

Woodfibre LNG Project – Draft VC Selection/ Draft AIR Working Group Comment Tracking Table

Please provide your feedback on the proposed Woodfibre LNG draft Application Information Requirements documents (July 28, 2014 Version) in the table provided below. If applicable, please indicate in the last column whether the issue is relevant to the Application Review phase, Permitting or both. Please update the file name to include your name, agency and date before you return it to Alanya Smith by email at Alanya.Smith@gov.bc.ca.

Date: 30/07/2014

Name: Paula Thorogood

Title: Heritage Resource Specialist

Affiliation: Archaeology Branch, FLNRO

Comment relevant to dAIR or other?	Relevant section and page number	Comment/ Issue Description/ Suggested Changes - Please be as specific as possible	Is a change to the dAIR required? [yes/no]	Application Review and/or Permitting Requirement?
dAIR/Other	Section 8 – Assessment of Potential Heritage Effects	To comply with legislative requirements, an Archaeological Impact Assessment (AIA) must be conducted under the terms and conditions of a Section 14 Inspection Permit, issued under the HCA. The Archaeology Branch cannot confirm at this time whether an application has been received for the study area.	No	Yes
Other	Section 8 – Assessment of Potential Heritage Effects	Until an AIA is completed, the Archaeology Branch will be unable to provide management recommendations for the proposed development.	No	Yes
dAIR	Section 8 – Assessment of Potential Heritage Effects	Only Squamish Nation is listed within the this Section of the dAIR; other Aboriginal groups may be identified as interested parties, per CAD (managed by MARR) – see response to Erin Hanson's comment regarding Section 2.2 (comment #5)	Yes	Yes

(To add additional rows: right click inside of the last row and select insert > insert rows below)