

ID #	Source			Doc Rev (Date)	Ref	Comment/Issue	Proponent Response	Proposed Change
	Commenter (Name)	Agency / First Nation	Date					
1	Anderson, Keith	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations	18-Mar-13	dAIR 1.0 (22Feb2013)	FLNRO-001	The proponent will be required to hold a tenure issued under the Lands Act for the purpose of gravel barge moorage and load out.	Lands Act tenure is included in the Preliminary List of Required Permits and Approvals (Table 2). The Lands Act tenure application has been submitted and will be revised to align with the final project design.	For clarification, the following has been added to Section 2.2.3.3: "The Proponent will hold a Land Act tenure, compliant with relevant government zoning, for the purpose of gravel barge moorage and load out. "
2	Anderson, Keith	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations	18-Mar-13	dAIR 1.0 (22Feb2013)	FLNRO-002	The tenure must be in compliance with local government zoning.	Zoning requirement is included in the Preliminary List of Required Permits and Approvals (Table 2).	For clarification, the following has been added to Section 2.2.3.3: "The Proponent will hold a Land Act tenure, compliant with relevant government zoning, for the purpose of gravel barge moorage and load out. "
3	Anderson, Keith	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations	18-Mar-13	dAIR 1.0 (22Feb2013)	FLNRO-003	Deep consultation will be required with First Nations who claim the site as part of their traditional territory.	First Nations Consultation requirements are outlined in the Section 11 Procedural Order. A summary of consultation activities undertaken and proposed with identified First Nations will be included in Section 3.3. First Nations Information Requirements will be addressed in Part C (Aboriginal Information Requirements).	None proposed.
4	Anderson, Keith	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations	18-Mar-13	dAIR 1.0 (22Feb2013)	FLNRO-004	During moorage or loading, all portions of the barge and tug must be within the boundaries of the tenure.	Acknowledged. The barge loading facility is proposed within the existing water lease and log dump area.	For clarification, the following has been added to Section 2.2.3.3: "During moorage or loading all portions of the barge and associated vessels will be within the boundaries of the water lease."
5	Anderson, Keith	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations	18-Mar-13	dAIR 1.0 (22Feb2013)	FLNRO-005	The tenure must be in compliance with the rules and regulations of the Department of Fisheries and Oceans.	Federal requirements are included in the Preliminary List of Required Permits and Approvals (Table 2).	None proposed.
6	Anderson, Keith	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations	18-Mar-13	dAIR 1.0 (22Feb2013)	FLNRO-006	The tenure must be authorized under the Navigation Act.	Understood. Federal requirements are included in the Preliminary List of Required Permits and Approvals (Table 2).	Table 2 in Section 2.8 modified to include Navigable Waters Protection Act.
7	Anderson, Keith	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations	18-Mar-13	dAIR 1.0 (22Feb2013)	FLNRO-007	No dredging or filling will be permitted without the prior written consent of DFO and FLNRO.	Acknowledged. The bathymetry of the near shore marine environment in the area of the proposed marine loading facility and jetty will not require dredging, so assessment of marine dredging or marine disposal of dredgeate, liquid or solid waste will not be a part of this project.	None proposed.
8	Anderson, Keith	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations	18-Mar-13	dAIR 1.0 (22Feb2013)	FLNRO-008	The proponent must obtain the written permission of the registered upland owners for the term of the proposed tenure.	Acknowledged. Registered upland owners are key stakeholders and will be consulted. The EAC Application/EIS will include documentation of consultation activities undertaken and proposed with the public and other key stakeholders.	None proposed.
9	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	2-Apr-13	dAIR 1.0 (22Feb2013)	FLNRO-009	The groundwater modelling should be done to test the project's likely effect on water volume in the Cluxewe River.	The Cluxewe River flows northwards into Broughton Strait just north of Port McNeill on the east coast of North Vancouver Island. Assume comment refers to McNab Creek. Potential effects on water volumes (base flow, high flow) of McNab Creek will be assessed.	None proposed.
10	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	2-Apr-13	dAIR 1.0 (22Feb2013)	FLNRO-010	The potential for sediment to enter into the creek/river should be addressed.	The assessment will identify and evaluate potential effects of the Proposed Project on surface water resource VCs, including the hydrologic response at the site from changes in drainage characteristics (i.e., changes in runoff coefficients and flow characteristics as well as effect on erosion and sedimentation at the site).	None proposed.
11	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	2-Apr-13	dAIR 1.0 (22Feb2013)	FLNRO-011	Possible effects of the project on other groundwater users (if any), including water quality needs to be death with.	The assessment method approach will include the use of a numerical model to predict and characterise potential effects of the Proposed Project on hydrogeology conditions, the groundwater regime, and groundwater quality. Potentially affected receptors will be identified.	Section 5.5.3 has been revised to read: "- Identify provincial and federal discharge requirements and evaluate potential effects of the Proposed Project on hydrogeology conditions, and the groundwater regime, and groundwater quality." Section 5.5.5 has been revised to read: "The assessment will ... evaluate potential effects of the Proposed Project on hydrogeology conditions, and the groundwater regime, and groundwater quality."
12	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	2-Apr-13	dAIR 1.0 (22Feb2013)	FLNRO-012	In some places extraction of the sand and gravel will be done from below the groundwater table. So, at the end of the project life span the excavated area will become a small lake. If so, then the water body may come under provincial Water Act, even though the proponent expressed their interest to maintain ownership and manage long term stewardship. Therefore, this issue needs to be addressed.	The final site reclamation will include a ground and surface water-fed pond, with the surrounding areas to be reclaimed by contouring the landscape, revegetation and planted forest. A preliminary Reclamation and Closure Plan will be prepared as part of the EAC Application/EIS, and will describe the proposed measures and commitments to remove surface facilities and reclaim areas and develop a functional ecosystem in the freshwater pit.	None proposed.
13	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	2-Apr-13	dAIR 1.0 (22Feb2013)	FLNRO-013	The Proponent should mention the total number of stream/creek/river crossing as well as water requirement (wash plant, camp use, and so on...), including the source of water.	The EAC Application/EIS will include project-related water requirements, proposed sources of water, and the number of required stream/creek/river crossings.	Section 2.2 has been revised as follows: - General surface and groundwater systems, including proposed sources of water and the number of required stream/creek/river crossings; - Project-related water requirements;
14	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	2-Apr-13	dAIR 1.0 (22Feb2013)	FLNRO-014	We like to know how the wash water will be contained. If it is contained by a dam then Dam Safety people needs to be involved based on the storage size	Wash water will be processed for removal of fines and silt in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will supplemented with make-up water by a groundwater well. The recycled wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities. No wash water will be discharged.	Section 2.2.3.2 revised as follows: "Wash water will be processed for removal of fines and silt in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will supplemented with make-up water by a groundwater well. The recycled wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities. No wash water will be discharged. "

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15	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	2-Apr-13	dAIR 1.0 (22Feb2013)	FLNRO-015	Proponent may need to address Dike Safety issues in the area	Acknowledged. The EAC Application/EIS will include an Environmental Management Programme that included Sediment, Erosion and Drainage Control and Water Management (including flood hazard management) Plans for construction and operational phases of the Project.	None proposed.
16	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	2-Apr-13	dAIR 1.0 (22Feb2013)	FLNRO-016	It is mentioned in page 6 of the Draft Application Information Requirement that all components of the proposed project will be outside existing natural watercourses, riparian areas and mature forest stands. However from Figure 3, it seems that the project boundary crosses a stream/creek at the western side which is contradictory to the statement	Figure 3 has been revised. The are some ephemeral streams fall within the western margin of the property boundary as currently defined. Ongoing upgrades to existing road infrastructure by BCTS will include the management of these watercourse crossings and upgrades to the logging road network.	Figure 3 has been revised.
17	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	2-Apr-13	dAIR 1.0 (22Feb2013)	FLNRO-017	We would like to know about the storm water management system of the proposed dredged site.	The EAC Application/EIS will include an Environmental Management Programme that included Sediment, Erosion and Drainage Control and Water Management Plans for construction and operational phases of the Project.	None proposed.
18	Moorhouse, Tara	Ministry of Jobs, Tourism and Skills Training, Tourism Strategy and Policy	5-Apr-13	dAIR 1.0 (22Feb2013)	MJTST-001	In terms the visual quality Valued Components, I would like to see attention paid to the visual quality of tourism/recreational interests in the area, with particular attention paid to the views from the surrounding land and from water crafts (kayaks, small and large pleasure boats, etc.) passing in front of the project.	The existing 300 m wide treed buffer will be maintained between the Property and the marine foreshore to limit potential visual, noise, dust and emission effects on the environment. Generally, the Regional Study Area (RSA) seeks to consider potential effects of the project on factors such as existing land uses (residential, commercial, parkland), employment, visual quality and viewsheds, and public health, and have been identified to include the McNab Creek watershed, along with the immediate area of Howe Sound and potentially shipping routes to and from the project site to the Proponent's processing facilities. The visual and aesthetic resource assessment RSA will include sensitive viewpoints from the surrounding area.	For clarification, the following has been added to Section 7.4.3.2: "Attention will be given to preserving the visual quality of the Site from surrounding lands and from watercraft."
19	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-001	The AIR should include a commitment to provide side slope angles and typical sections through the pit pond to illustrate the final geometry of the slope/pit. Setbacks of the pit crest to infrastructure that will be utilized by mine personnel are also required (i.e. the existing road on the west side of the proposed pit). In addition, factors of safety for the side slopes should be provided where sloughing or slope failure could cause retrogression of the pit crest to a degree that could impact on the safety of mine personnel. This should include consideration of seismic stability.	The EAC Application/EIS will illustrate the final geometry of the slope/pit, including side slope angles and typical sections through the pit pond. Setbacks of the pit crest to infrastructure that will be utilized by mine personnel will be described. Factors of safety for the side slopes will be provided where sloughing or slope failure could cause retrogression of the pit crest to a degree that could impact on the safety of mine personnel.	Section 2.2.3.1 revised to include the following: "The EAC Application/EIS will illustrate the final geometry of the slope/pit, including side slope angles and typical sections through the pit pond. Setbacks of the pit crest to infrastructure that will be utilized by mine personnel will be described. Factors of safety for the side slopes will be provided where sloughing or slope failure could cause retrogression of the pit crest to a degree that could impact on the safety of mine personnel."
20	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-002	Factors of safety for the side slopes ... should include consideration of seismic stability.	Stability evaluations for both static and seismic cases will be provided as part of the geotechnical and natural hazards assessment.	None proposed.
21	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-003	The AIR is to include a requirement for a conceptual monitoring plan for side slope deformation and for monitoring piezometric water levels.	A conceptual monitoring plan for piezometric water levels and side slope deformation will be included as part of the Environmental Management Programme.	Section 12.2 has been revised to include: "- Pit Slope Stability Monitoring Plan, including conceptual monitoring plan for piezometric water levels and side slope deformation."
22	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-004	Estimates of heights, volumes, and slope angles for the proposed overburden stockpiles should be included in the application.	Estimates of heights, volumes, and slope angles for the proposed overburden stockpiles will be provided.	Section 2.2.3.1 has been revised to include: "The EAC Application/EIS will include estimates of heights, volumes, and slope angles for proposed overburden stockpiles."
23	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-005	A conceptual design for the groundwater channel plug should be included in the application.	A conceptual design for the groundwater channel plug will be provided.	Section 2.2.3.1 has been revised to include: "The EAC Application/EIS will include a conceptual design for the groundwater channel plug."
24	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-006	Processing section to include settling pond storage volumes, embankment heights, foundation preparation, and slope angles are requested (at a conceptual design level), including at least one typical cross-section.	In response to feedback through consultation, Project description has been revised in response to replace sedimentation/settling ponds with a 95% efficient wash plant to be fed using recycled water from two storage tanks supplemented by a groundwater well. The wash water will be screened and pressed to remove the sediment. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive reclamation activities.	Revised Section 2.2.3 to removed any reference to sedimentation/settling ponds.
25	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-007	Anticipated heights, volumes, and slope angles are requested for the proposed stockpiles of processed material and for the temporary fines stockpile.	Anticipated heights, volumes, and slope angles for proposed stockpiles of processed material and for the temporary fines stockpile will be provided.	Section 2.2.3.2 has been revised to include: "The EAC Application/EIS will include anticipated heights, volumes, and slope angles for proposed stockpiles of processed material and for temporary fines stockpiles."
26	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-008	Marine Loading Facility section to include an illustration of the conceptual design of the sleeper foundation for the barge loader and of the pile design (diameters, depths, etc.) should be included as an AIR requirement.	Conceptual design drawings of the sleeper foundation for the barge loader and of the pile design will be provided.	Section 2.2.3.3 has been revised to include: "The EAC Application/EIS will include conceptual design drawings for the marine loading facility, including piles and other in-water components."
27	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-009	Geotechnical/ Natural Hazards section is to include a commitment to assess the potential for flooding, debris floods, and/or debris flows in the McNab channel, and an assessment of the adequacy of the proposed upgrades to the training berm.	The potential for flooding, debris floods, and/or debris flows in the McNab channel and the adequacy of the proposed upgrades to the training berm will be assessed.	Section 5.3.1 revised as follows: "For the purposes of this assessment, geotechnical and natural hazard VCs include timber harvesting (loss of ground cover) potentially resulting in mudslides, <u>flooding</u> , <u>debris floods</u> , debris flows or ground movement, slope instability and landslides, as well as the assessment of potential impact of geotechnical hazards on streams or wetlands and worker safety."
28	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-010	A conceptual design for the training berm upgrades (including a typical section through the berm) will also be required.	A conceptual design for the training berm upgrades (including a typical section through the berm) will be provided.	Section 2.2.3.1 revised to include: "A conceptual design for the training berm upgrades (including a typical section through the berm) will also be provided."

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29	Warnock, George	Ministry of Energy, Mines and Natural Gas, Geotechnical Engineering	8-Apr-13	dAIR 1.0 (22Feb2013)	MEM-011	The "Accidents and Malfunctions" section should explicitly include consideration of the potential for sloughing of the pit side slopes and the potential effects on the safety of mine personnel.	Factors of safety for the side slopes will be provided where sloughing or slope failure could cause retrogression of the pit crest to a degree that could impact on the safety of mine personnel.	Accidents and Malfunctions component of Section 11.0 revised to include: "- Factors of safety for the side slopes will be provided where sloughing or slope failure could cause retrogression of the pit crest to a degree that could impact on the safety of mine personnel."
30	Watson, Cynthia	Vancouver Coastal Health	9-Apr-13	dAIR 1.0 (22Feb2013)	VCH-001	The proponent is advised to identify any water supply systems (including private) potentially impacted by the proposed aggregate project and that they consult with the owners of those water systems.	Acknowledged. Registered upland owners are key stakeholders and will be consulted. The EAC Application/EIS will include documentation of consultation activities undertaken and proposed with the public and other key stakeholders.	Acknowledged. Registered upland owners are key stakeholders and will be consulted. The EAC Application/EIS will include documentation of consultation activities undertaken and proposed with the public and other key stakeholders.
31	Watson, Cynthia	Vancouver Coastal Health	9-Apr-13	dAIR 1.0 (22Feb2013)	VCH-002	The proponent is advised to identify any water supply systems (including private) potentially impacted by the proposed aggregate project and that they consult with the owners of those water systems. Ref VCH-010.	Acknowledged. Water supply system owners are key stakeholders and will be consulted. The EAC Application/EIS will include documentation of consultation activities undertaken and proposed with the public and other key stakeholders. Section 9.1.3.3. will be revised to include the BC Drinking Water Protection Act and Regulation.	Section 9.1.3.3 has been revised as follows: "- Identify and evaluate potential human health effects related to predicted project-related effects to water quality (including drinking water), air quality, change to ambient light, change to noise levels; "
32	Watson, Cynthia	Vancouver Coastal Health	9-Apr-13	dAIR 1.0 (22Feb2013)	VCH-003	Compliance with Drinking Water Protection Act with relation to water supply system servicing to all buildings on the BURNCO operation site. The responsible agency for the issuance of approvals in the Howe Sound area is ... Vancouver Coastal Health.	Acknowledged. A drinking water supply system is not proposed. Notwithstanding, Drinking Water Protection Act permit regulations have been included in the Preliminary List of Required Permits and Approvals (Table 2) should a drinking water supply system be determined to be needed.	Table 2 revised to identify Vancouver Coastal Health as the agency responsible for the Drinking Water Protection Act.
33	Watson, Cynthia	Vancouver Coastal Health	9-Apr-13	dAIR 1.0 (22Feb2013)	VCH-004	Prior to construction of a water supply system, a Construction Permit must be obtained (unless exempted by regulation); and prior to operating the water system an Operating Permit is required. <i>Note: Existing drinking water systems on the proposed site do not have the necessary approvals under the Drinking Water Act</i>	Acknowledged. A drinking water supply system is not proposed. Notwithstanding, Drinking Water Protection Act permit regulations have been included in the Preliminary List of Required Permits and Approvals (Table 2) should a drinking water supply system be determined to be needed.	Table 2 has been revised as follows: "Food premises permit, water supply system construction permit, <u>operating permit</u> and various occupancy approvals
34	Watson, Cynthia	Vancouver Coastal Health	9-Apr-13	dAIR 1.0 (22Feb2013)	VCH-005	Onsite sewerage disposals systems processing domestic sewerage less than 22,700 litres/day are subject to the BC Sewerage Disposal Regulation; preconstruction and operation approvals are required.	BC Sewerage Disposal Regulation permit requirements will be included in the Preliminary List of Required Permits and Approvals (Table 2).	Table 2 revised to include the BC Sewerage Disposal Regulation and associated permit requirements.
35	Watson, Cynthia	Vancouver Coastal Health	9-Apr-13	dAIR 1.0 (22Feb2013)	VCH-006	Consult with the Sunshine Coast Regional District for information on applicable noise by laws.	Acknowledged. The Sunshine Coast Regional District will be consulted. The EAC Application/EIS will include documentation of agency consultation activities undertaken and proposed.	None proposed.
36	Watson, Cynthia	Vancouver Coastal Health	9-Apr-13	dAIR 1.0 (22Feb2013)	VCH-007	Consult with the Sunshine Coast Regional District for information on applicable noise by laws.	Acknowledged. The Sunshine Coast Regional District will be consulted on applicable noise bylaws.	Section 9.2.2. has been revised as follows: "The EAC Application/EIS will provide a brief summary of legislation, regulation or policy related to noise VCs, including information on applicable noise bylaws provided by the Sunshine Coast Regional District . "
37	Watson, Cynthia	Vancouver Coastal Health	9-Apr-13	dAIR 1.0 (22Feb2013)	VCH-008	Although a construction work camp is mentioned in the draft AIR; the proponent is advised of the BC Industrial Camp Regulation.	An industrial camp is not proposed as part of the Project.	None proposed.
38	Watson, Cynthia	Vancouver Coastal Health	9-Apr-13	dAIR 1.0 (22Feb2013)	VCH-009	Although visual and aesthetic resources are not directly referenced in Public Health legislation the links between aesthetics and environmental health are recognized. The WHO European Charter on Environment and Health, 1989, states that "good health and well being require a clean and harmonious environment in whichaesthetic factors are given their due importance."	Acknowledged. The results of a visual and aesthetic resource assessment will be included in the EAC Application/EIS.	None proposed.
39	Rafael, David	Sunshine Coast Regional District	12-Apr-13	dAIR 1.0 (22Feb2013)	SCRD-001	Items to be addressed to include environmental impact on key species such as eel-grass, forage fish and cetaceans (especially from increased barge movement) needs to be emphasized and appropriate studies provided.	Valued components that will be the focus of the effects assessment are presented in Table 3. These include critical species and associated habitat. The potential effects of barging on identified VCs will be assessed.	For clarification, Section 5.1.4 has been revised as follows: "- Assessment of marine mammals (including cetaceans and pinnipeds) whose known distribution overlaps within the LSA and RSA will be conducted through a literature review, " "- Maps showing all fish habitats (including eelgrass beds), sampling locations, and sampling results."
40	Rafael, David	Sunshine Coast Regional District	12-Apr-13	dAIR 1.0 (22Feb2013)	SCRD-002	Consideration should be given to making improvements to the foreshore area, that may have suffered from the impacts of previous forestry and industrial activity, in light of the proposed loading and barge facility.	The potential effects of the project (including loading and barging) on local and regional study areas within Howe Sound will be assessed. Measures will be proposed to avoid potential adverse effects on Howe Sound and its ongoing recovery.	None proposed.
41	Rafael, David	Sunshine Coast Regional District	12-Apr-13	dAIR 1.0 (22Feb2013)	SCRD-003	There is a gap relating to assessing the potential impact on economic activity such as tourism, resulting from the mine.	Recreation and tourism is a valued component to be included as part of the social effects assessment.	None proposed.
42	Rafael, David	Sunshine Coast Regional District	12-Apr-13	dAIR 1.0 (22Feb2013)	SCRD-004	Include a section on the environmental recovery of Howe Sound, including estimated investment to date that achieved the current improvements and any proposed reclamation projects, the objective is to assess what impact the mine (including barge activity and potential accidents) could have on the on-going recovery of Howe Sound.	The potential effects of the project (including barging) on local and regional study areas within Howe Sound will be assessed. Measures will be proposed to avoid potential adverse effects on Howe Sound and its ongoing recovery.	None proposed.
43	Rafael, David	Sunshine Coast Regional District	12-Apr-13	dAIR 1.0 (22Feb2013)	SCRD-005	Include a section on the environmental recovery of Howe Sound, including estimated investment to date that achieved the current improvements and any proposed reclamation projects, the objective is to assess what impact the mine (including barge activity and potential accidents) could have on the on-going recovery of Howe Sound.	The EAC Application/EIS will include an assessment of potential effects of accidents, malfunctions and unplanned events, and describe how these would be managed and/or mitigated.	None proposed.

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44	Rafael, David	Sunshine Coast Regional District	12-Apr-13	dAIR 1.0 (22Feb2013)	SCRD-006	As mitigation/benefit the AIR should include a review of improvements such as new trails, kayak landing near or on the site.	The EAC Application/EIS will include mitigation measures proposed to avoid or limit potential adverse project-related effects. BURNCO will consider innovative measures where feasible and required to mitigate potential effects.	None proposed.
45	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-001	Introduction, p. ii, last sentence – Suggesting that it reads as follows: An assessment is also required under the former <i>Canadian Environmental Assessment Act</i> .	Acknowledged.	Revised as follows: "An assessment is also required under the <u>former</u> Canadian Environmental Assessment Act ¹ "
46	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-002	Section 2.4 (Federal Scope of Proposed Project), p. 11 - When should we expect to see the list of the Project components to be reviewed in the environmental assessment (i.e. What is the scope of the federal review in terms of project components)?	The federal scope of the proposed project consists of the construction, operating and decommissioning of the following on-site and off-site components : - Aggregate pit development with proposed production volumes of up to 1.6 million tonnes per annum; - A processing plant; - Marine loading facility; - Shipping; and - Reclamation, closure and monitoring. This is based on the key components of the Proposed Project described in CEAA's Background Document supporting Public Participation Opportunity #1 in accordance with the <i>Canadian Environmental Assessment Act</i> . Federal scope will be refined in discussion with CEAA.	Section 2.3 revised as follows: "The EAC Application/EIS will describe the scope of the Proposed Project for the purpose of the provincial EA, in accordance with the Section 11 Order <u>and any subsequent amendments</u> . <u>The provincial scope of the proposed project consist of the following on-site and off-site components and activities associated with the development of a sand and gravel pit with proposed production volumes of up to 1.6 million tonnes per annum:</u> - <u>A processing plant;</u> - <u>Stockpiles;</u> - <u>Dredging equipment;</u> - <u>A marine loading facility; and</u> - <u>Other buildings and facilities including a site office, washrooms, first aid facility and helipad, caretaker's cabin and a small craft dock with a tie up for a float plane."</u> Section 2.4 revised as follows: "The federal scope of the proposed project consists of the construction, operating and decommissioning of the following on-site and off-site components : - <u>Aggregate pit development with proposed production volumes of up to 1.6 million tonnes per annum;</u> - <u>A processing plant;</u> - <u>Marine loading facility;</u> - <u>Shipping; and</u> - <u>Reclamation, closure and monitoring."</u>
47	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-003	The spatial boundaries of the Regional Study Area (RSA) for barge shipping (i.e. S 7.2.3.2, p. 66 and S 4.3, p.23) and scoping of barge shipping into the environmental assessment review are not described consistently throughout the draft AIR/EIS Guidelines.	The RSA of the Marine Transportation Assessment is defined by project-related barge traffic in Howe Sound (i.e., shipping routes from the Proposed Project site through Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel to the north and south arm of the Fraser River). Figure 6 will be revised accordingly.	Section 4.3 revised as follows: Regional study areas (RSAs) for human / social and biophysical environmental assessment disciplines are larger in scope, encompassing an area broader than the immediate footprint of the Proposed Project. The RSA seeks to consider potential effects of the project on factors such as existing land uses (residential, commercial, parkland), employment, visual quality and viewsheds, and public health, and have been identified to include the McNab Creek watershed, along with the immediate area of Howe Sound and potentially shipping routes to and from the Proposed Project site <u>through Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel, to the north arm of the Fraser River, project site to the Proponent's processing facilities (Figure 5).</u> Figures will be revised to reflect this correction.
48	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-004	Section 2.5 (Alternate Means of Undertaking the Proposed Project), p. 12 - Shouldn't there also be an analysis of the alternatives in terms of technical and economical feasibility?	Section 2.5 includes the following: - An analysis of alternative means of undertaking the Proposed Project <u>(including alternative transportation options)</u> that are technically and economically feasible;"	None proposed.
49	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-005	Section 2.8 (Applicable Permits & Approvals), p. 14 - Please add the <i>Navigable Waters Protection Act</i> , administered by Transport Canada. An approval might required for the marine loading facility.	Understood. Federal requirements are included in the Preliminary List of Required Permits and Approvals (Table 2).	Table 2 in Section 2.8 modified to include Navigable Waters Protection Act.
50	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-006	Section 5.1.6 the proponent will need to submit their fish habitat compensation plan drawings to Transport Canada for review, in order to determine if any of the proposed in-water works could potentially impede on navigation.	Acknowledged. The requested information will be prepared to support a Section 35(2) Authorization. This information will be consistent with the effects assessment and proposed mitigation plans presented in the EAC Application/EIS, but may require an additional level of detailed project design and compensation habitat planning than would be required for the EA.	None proposed.
51	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-007	Section 7.2.4 to include navigational use by Aboriginal groups	Text has been updated in response to this comment.	Section 7.2.4 revised as follows: "- Known navigational use of each water body, <u>including navigational use by First Nations (where available)</u> , and current shipping numbers..."
52	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-008	Section 7.2.5 to include TK, where available.	While Section 7.2.5 identifies "traditional ecological or community knowledge, where available," text has been updated in response to this comment. See response to TC-009.	For clarification, Section 7.2.5 revised as follows: "The effects assessment will consider traditional ecological or community knowledge, where available."

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53	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-009	Section 7.2.5 p. 66, 2nd sentence – "The assessment of effects will identify past, present of future projects/activities...". Please revise the wording as it does not make sense. In addition, please ensure that Traditional (Aboriginal) knowledge is taken into consideration.	Agreed. The identified phase will be removed from Effects Assessment sections throughout the document. Text will be updated in all Effects Assessment sections to clearly identify the consideration of "traditional ecological or community knowledge, where available."	Section 7.2.5 revised as follows: "The assessment will identify and evaluate potential adverse effects of all project phases of Proposed Project on marine transportation VCs identified in Table 3. The assessment of effects will identify past, present for future projects/ activities that may impact the VC and describe traditional ecological or community knowledge, where available. The effects assessment will consider traditional ecological or community knowledge, where available. " Change made to Effects Assessment sections throughout the document.
54	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-010	Section 3.3.1 to separate and itemize the two separate FN issues relating to 1) Key issues raised by FN; and 2) the degree to which the issues are considered/ addressed by the Proponent.	Section 3.3.1 has been restructured as proposed by Transport Canada.	Section 3.3.1 has been revised as follows: "- A summary of key issues raised by First Nations and/or the degree to which First Nations issues are considered resolved and/or addressed by the Proponent. - A summary of key issues identified by First Nations; and - The degree to which First Nations issues are considered resolved and/or addressed by the Proponent."
55	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-011	third bullet - to include navigational use of the area, where possible.	Section 10.0 will consider, to the extent possible, all uses of the Proposed Project area by First Nations, including for navigational purposes, as identified in consultation with First Nations.	None proposed.
56	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-012	first bullet - "Provide a non-confidential summary of past, present, and anticipated future uses of the Proposed Project area by First Nations". Please include any navigational use of the area, where possible.	Section 10.0 will consider, to the extent possible, all uses of the area by First Nations, including for navigational purposes, as identified in consultation with First Nations.	None proposed.
57	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-013	second bullet - wording is confusing as to how the Proponent will gather information on asserted or established aboriginal rights. Clear, pro-active working may be more appropriate.	Text has been updated in response to this comment.	Section 10.1 revised as follows: "- Identify any specific asserted or established aboriginal rights (including title) <u>in the Proposed Project area, in consultation with First Nations;</u> "
58	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-014	third bullet ... include rights related to navigation.	Section 10.1 will consider, to the extent possible, all specific asserted or established aboriginal rights relative to the Proposed Project area, including those that may be related to navigation, as identified in consultation with First Nations.	None proposed.
59	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-015	fourth bullet ... include rights related to navigation.	Section 10.1 will consider the effects of the Proposed Project on specific asserted or established aboriginal rights, including those that may be related to navigation, as identified in consultation with First Nations.	None proposed.
60	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-016	second bullet ... include potential impacts to rights related to navigation.	Section 10.2 relates to other interests that are not already identified in Section 10.1. Text has been updated for clarification.	For clarification, Section 10.2 has been revised as follows: "- Identify aboriginal interests with respect to potential social, economic, environmental, heritage and health effects (to the extent not already identified in <u>Section 10.1</u> above), in consultation with First Nations; and - Describe how these <u>effects</u> have been <u>or will be</u> addressed."
61	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-017	first bullet – Should read as follows for clarity and consistency: "...Proponent's past and planned consultation activities...."	Text has been updated in response to this comment.	Section 10.3 revised as follows: "- Refer back to Part A, Section 3.3, describing the Proponents' past and planned <u>consultation</u> activities with First Nations."
62	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-018	third bullet - include issues related to navigation	Section 10.3 will describe key issues related to the Proposed Project EA, including those that may be related to navigation, as identified in consultation with First Nations.	None proposed.
63	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-019	To clarify if the summary is the same as summary in 3.3.1.	The summary presented in Section 3.3.1 will describe the consultation activities that the Proponent has undertaken for the Pre-Application period, including key issues identified by First Nations in the course of that consultation, and the degree to which the Proponent considers these issues resolved or addressed. Section 10.4 is a summary of Part C, and will to some degree overlap with aspects of Section 3.3.1.	None proposed.
64	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-020	Restructure Table 12 to include Aboriginal groups; the Asserted/established right associated with each group; Potential impacts on each identified asserted/established right in the previous column; and Follow-up or Next Steps (e.g. none required, on-going consultation).	Section 10.4, Table 12 has been updated in response to this comment.	Section 10.4, Table 12 revised to include the following columns, which will be presented for each identified First Nation: - Identified Aboriginal Right / Interest - Potential Project Effect - Mitigation / Accommodation Measure(s) - Status / Next Steps The content for this table will be developed in consultation with identified First Nations.
65	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-021	To include as one of the objectives that monitoring is to verify/ensure that mitigation measures are being implemented.	Section 13.0 will be revised to include verification of the implementation of mitigation measures as an objective of the environmental monitoring and follow-up program.	Section 13.0 revised as follows: "- Monitor the <u>implementation and</u> effectiveness of any measures taken to mitigate the adverse environmental effects of the Proposed Project."
66	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-022	To include adaptive management as one of the components of the follow-up program.	Section 13 will be revised to include adaptive management as a feature of the environmental monitoring and follow-up program.	Section 13.0 revised as follows: "- Effectiveness assessment, <u>including adaptive management</u> , of mitigation measures being applied against proposed to mitigate potential environmental effects."
67	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-023	first bullet - to be adjusted to include "through the re-design or relocation of the Proposed Project or some of its components..."	Section 14 will be revised to reflect the notion that mitigation can apply to one of more components of the Proposed Project	Section 14.0 revised as follows: "- A Summary of potential residual environmental effects of the Proposed Project after application of recommended mitigation measures and habitat compensation strategies that cannot be completely avoided or mitigated through the re-design or relocation of the Proposed Project, <u>in whole or in part</u> , or through Proponent commitments;"

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68	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-024	The dAIR to include references to the federal EA process.	Section 16 will be revised to include reference to the federal EA review process.	Section 16 revised as follows: "- Describe how the Proposed Project aligns with the goals of the <u>provincial (BCEAA) and federal (CEAA) EA review processes</u> ; and"
69	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-025	Figure 5 is referred to in Section 4.3 (Spatial Boundaries) where the RSA is discussed. Please clarify the legend of Figure 5, since it is not clear which of the two Local Study Areas (LSAs) outlined is the RSA.	Acknowledged. Figure 5 legend will be clarified.	Figures to be revised accordingly.
70	L'Heureux, Suzanne	Transport Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	TC-026	Figure 5, Socioeconomic Study Area – Figure 5 is referred to in Section 4.3 (Spatial Boundaries) as the RSA; however, in the legend only the LSA is defined.	Acknowledged. Figures will be corrected.	Figures to be revised accordingly.
71	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-001a	The proponent mentions using a sedimentation/settling pond. Does the proponent intend to use the settling pond for deleterious substances? The proponent should be aware that Section 36(3) of the federal Fisheries Act, administered by Environment Canada, prohibits the discharge of deleterious substances to waters frequented by fish, or to a place where those substances might enter such waters. Environment Canada requests information on the proponent's sampling plan for the settling pond.	In response to feedback through consultation, the Proposed Project has been revised to replace sedimentation/settling ponds with a 95% efficient wash plant to be fed using recycled water from two large storage tanks supplemented with make-up water by a groundwater well. The wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried through this process. The resulting dry cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities. No wash water or deleterious substances will be discharged.	Section 2.2.3.2 revised as follows: "Wash water will be processed for removal of fines and silt <u>in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will be supplemented with make-up water by a groundwater well. The recycled wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities. No wash water will be discharged.</u> "
72	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-001b	Environment Canada requests the proponent provide additional information on the waste from mining of the aggregate, in particular, how acid producing rock waste will be managed	Static and kinetic leachate testing is being conducted to characterize acid generation potential of aggregate and surface materials. Geochemical modelling will be undertaken to assess acid rock drainage (ARD) potential associated with mine waste.	Section 5.1.4 Baseline Conditions revised to include: "- <u>Static and kinetic leachate testing to characterize acid generation potential of aggregate and surface materials. Geochemical modelling will be undertaken to assess ARD potential associated with mine waste.</u> " Section 5.1.5 Effects Assessment revised as follows: "Where applicable, the assessment of potential effects will provide cross-references to the surface water and groundwater modelling sections of the report. More specifically, this section will integrate results of hydrological predictive modelling along with surface water hydrology results to develop contaminant concentration predictions, <u>including potential ML-ARD issues associated developing the Proposed Project.</u> "
73	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-002	The proponent mentions that no wash water will be discharged outside the pit and water will be contained within the processing facilities and site, and will be reused through a 95% efficient recycling process. Environment Canada recommends the proponent elaborate on how 95% efficiency will be achieved and to provide details on pit construction including materials used for lining, etc. Leakage estimates should be included as well as an indication of potential impacts to groundwater.	Wash water will be processed for removal of fines and silt in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will be supplemented with make-up water by a groundwater well. The recycled wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities. No wash water will be discharged. The pit will not be lined. The EAC Application/EIS will present pit construction materials and a preliminary Reclamation and Closure Plan that will describe proposed measures and commitments to remove surface facilities and reclaim areas and develop a functional ecosystem in the freshwater pit. Section Groundwater Resource Assessment will consider estimates of leakage from the pit.	Section 2.2.3.2 revised as follows: "Wash water will be processed for removal of fines and silt <u>in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will be supplemented with make-up water by a groundwater well. The recycled wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities. No wash water will be discharged.</u> "
74	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-003	The proponent indicates that other worker facilities (including an office, washroom, lunch room) will be built on site. Environment Canada recommends a map outlining these facilities in detail, their placement within the Project site as well as details on how the Proponent will ensure meeting end of pipe regulations for waste water. Information on facilities for storing diesel, gasoline or other harmful substances should also be included.	The EAC Application /EIS will include detailed drawings outlining the location of onsite facilities. No waste water discharge is proposed. Upgrades to an existing fuelling facility are proposed for the storage of diesel and gasoline for on-site equipment. The EAC Application/EIS will include a description of the storage facilities, as well as a list of diesel, gasoline or other substances that may be corrosive, volatile or reactive and that may be shipped to and stored on site. Construction and Operational Environmental Management Programs contained in Section 12.0 will include - Materials Storage, Handling and Waste Management Plan - Spill Prevention and Emergency Response Procedures.	To clarify, Sections 12.1 Construction Environmental Management Programme and 12.2 Operational Environmental Management Programme will be revised as follows: "- <u>Materials Storage, Handling and Waste Management, including a list of diesel, gasoline or other substances that may be corrosive, volatile or reactive and that may be shipped to and stored on site.</u> "

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75	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-004	The proponent states that an old small craft dock will be removed and a new one put into place including an upgrade to the marine barge grid. Environment Canada requests clarity on how the marine facilities will be built and further discussion on facility construction and marine placement of materials, include any dredged material.	The bathymetry of the near shore marine environment in the area of the proposed marine loading facility and jetty will not require dredging, so assessment of marine dredging or marine disposal of dredgeate, liquid or solid waste will not be a part of this project. The EAC Application/ EIS will include information on how the marine facilities will be built and further discussion on facility construction.	None proposed.
76	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-005	For substances such as diesel, gasoline or others that may be corrosive, volatile or reactive, Environment Canada recommends listing and describing the shipment and storage of such materials in detail and providing the information on environmental emergency practices in case of an emergency.	The EAC Application / EIS will include a list of diesel, gasoline or other substances that may be corrosive, volatile or reactive and that may be shipped to and stored on site. Construction and Operational Environmental Management Programs contained in Section 12.0 will include - Materials Storage, Handling and Waste Management Plan - Spill Prevention and Emergency Response Procedures.	To clarify, Sections 12.1 Construction Environmental Management Programme and 12.2 Operational Environmental Management Programme will be revised as follows: "- Materials Storage, Handling and Waste Management, <u>including a list of diesel, gasoline or other substances that may be corrosive, volatile or reactive and that may be shipped to and stored on site.</u> "
77	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-006	Environment Canada requests an assessment on vegetation/wildlife disturbance due to small aircraft noise, as well as increased barge traffic along the transportation route.	The Terrestrial Wildlife and Vegetation Assessment (Section 5.2.5 Effect Assessment) includes sensory disturbance for wildlife (i.e., "potential for effects from alterations to noise and light regimes"). Text will be revised to specifically include potential effects on marine mammals, including effects of underwater noise.	Section 5.1.5 revised to include the following: "- <u>Direct and indirect effects on marine mammals and birds associated with shipping activities, including underwater noise.</u> "
78	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-007	Environment Canada requests the proponent to elaborate on how it will limit the use of electrically powered equipment for extraction, processing and loading of aggregate.	Section 2.2.4 does not state that the use of electrically powered equipment will be limited, but that the use of electrically powered equipment to extract, process and load the aggregate resource will avoid and limit the amount of exhaust emissions related to burning fossil fuel during aggregate extraction.	None proposed.
79	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-008	Environment Canada requests further information on the consultation process the proponent has engaged in with nearby communities such as Squamish, Gibson's and West Vancouver where temporary workers may live during the construction phase of the Project. This may or may not be linked to Section 3.4.1 (p.16) of the dAIR.	Section 3.4.1 will document the process and outcome of consultations with nearby communities.	None proposed.
80	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-009	Table 3 - Migratory Birds are a responsibility of Environment Canada under the Migratory Birds Convention Act and Species at Risk Act. Other aquatic species under the <i>Species at Risk Act</i> are the responsibility of the Department of Fisheries and Oceans. Jurisdictional responsibilities should be clarified in the section titled Migratory Marine Birds.	Acknowledged.	Table 2 revised to clarify jurisdictional responsibilities.
81	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-010	Table 3 - In the section titled Terrestrial Wildlife and Vegetation, under Terrestrial Species at Risk and their habitat, a list of wildlife and birds that are Species at Risk are listed. However, under the Vegetation section, no Species at Risk are listed. Environment Canada requests more information on possible vegetative Species at Risk that may be in the range of the Project LSA or RSA.	Table 3 revised to include listed rare plant species with the potential to occur in the LSA.	Table 3 revised as follows: Terrestrial vegetation and their habitat: - Environmentally Sensitive Ecosystems; - Rare plants, <u>including</u> : - <u>Fleshy Jaumea</u> ; - <u>Kamchatka spike-rush</u> ; - <u>Menzies' burnet</u> ; - <u>Northern adder's tongue</u> ; - <u>Small spike rush</u> ; - <u>Snow bramble</u> ; - <u>Western St. John's wort</u> ; and - <u>White adder's mouth orchid</u>
82	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-011	Table 3 - Under Geotechnical and Natural Hazards, Environment Canada recommends adding "Alteration of physical terrain". Information on impacts to the environment due to the open pit style of the mine and the alteration of the current valley is recommended.	Acknowledged.	Table 3 revised to include "Alteration of Physical Terrain" as supporting rationale for terrain and natural hazards VCs.
83	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-012	Table 3 - Under Surface Water Resources, Environment Canada recommends adding the valued component "Change in water quality due to redirection and use of groundwater within the Project"	Acknowledged.	Table 3 revised to include "Redirection and use of groundwater" as supporting rationale for surface water resources VC (water quality).
84	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-013	Table 3 - Environment Canada requests a new discipline/theme section on Environmental Emergencies be added to address VC's on possible environmental emergencies within the Project site, such as spills of aggregate material or fuel used for machinery.	Section 11 includes the Federal Information Requirement to assess effects of accidents and malfunctions, and to identify mitigation measure to avoid or limit the likelihood and severity of these effects.	None proposed.
85	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-014	Environment Canada requests the following temporal boundary be included prior to other temporal boundaries listed: Project Site Baseline (past data and/or current data prior to construction)	For the purpose of the assessment, the temporal boundary is defined by the phases of the Proposed Project (construction, operation, reclamation and closure)	None proposed.
86	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-015	Environment Canada recommends putting the Compilation of Relevant Background Information section before Section 4.0 Assessment Methods. The Application information will be easier to follow if baseline information is put before the assessment methodology and VC's.	The Compilation of Relevant Background Information is presented before the assessment methodology presented in Section 4.6. The VCs and spatial/temporal boundaries must be defined before relevant background information can be compiled.	None proposed.

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87	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-016	Environment Canada recommends adding Best Management Practices as part of proposed mitigation measures.	For all components, mitigation measures will include those considered in the design and operation of the Proposed Project, including Best Management Practices, and will include any additional measures, works, processes or features that were not part of the basic features of the Proposed Project.	For clarification, Section 4.6.2 will be revised as follows: "Mitigation measures will include those that are considered in the design and operation of the Proposed Project, <u>including best management practices</u> , and will include any additional measures, works, processes, or features that were not part of the basic features of the Proposed Project."
88	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-017	The proponent states " <i>The level of predictive confidence of an effect will be discussed.</i> " The word predictive is used several times in this and following paragraphs. Environment Canada requests clarity on whether " <i>predicted</i> " refers to the predicted environment effects based on the proponent's opinion using qualitative studies, data, etc. or if it refers to predictions made on possible effects using modelling.	The EA will include qualitative (i.e., professional judgment) and quantitative (including modelling) predictions, as appropriate for a given VC.	None proposed.
89	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-018	Environment Canada recommends adding a section on modelling and how these predictions will be used to assess environmental effects.	EAC Application/EIS will include a description of how model predictions were used to assess potential effects and how monitoring data was used to inform predictive modelling.	Section 4.1 General revised to include: "- A description of how model predictions were used to assess potential effects and how monitoring data was used to inform predictive modelling."
90	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-019	Environment Canada recommends putting " <i>Migratory seabirds whose known range overlaps the LSA:</i> " into a different section and not under Fish Distribution and Abundance. All migratory birds (not just seabirds) should be considered within the LSA and RSA.	Acknowledged. Section 5.5.1.4 has been revised as suggested. Other migratory birds are included in the terrestrial wildlife and vegetation assessment.	Section 5.1.4 revised as follows: "- Fish Distribution and Abundance, including: Migratory seabirds whose known range overlaps the LSA; " "- Assessment of shorebirds migratory marine birds within the LSA will be conducted through a literature review, marine observations and surveys. Migratory seabirds whose known range overlaps the LSA. "
91	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-020	Environment Canada recommends a new section allocated to an assessment of Species at Risk (especially those listed as Schedule 1 under the <i>Species at Risk Act</i>). This should include migratory birds, wildlife and vegetation (including the Riparian area) with the appropriate LSA and RSA assessments.	Required information will be provided by Section 11 Requirements for Federal Environmental Assessments: - Species at Risk.	None proposed.
92	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-021	Environment Canada requests clarification on the definition of freshwater in the following phrase: " <i>Assessment of water quality of freshwater and marine environments will be conducted.....</i> ". Does freshwater in this statement include both surface water and groundwater when they discharge at the same location?	Yes, freshwater in this statement refers to both surface water and groundwater quality.	For clarification, Section 5.1.4 has been revised as follows: "- Assessment of water quality of freshwater (surface water and groundwater) and marine environments will be conducted in 2012 to characterize baseline conditions."
93	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-022	Environment Canada recommends the proponent assess whether the area along the shoreline is used for shellfishing.	Potential effects on recreational shellfish harvesting will be assessed as part of the Non-Traditional Land Use Assessment (VC Harvesting Fish and Wildlife).	None proposed.
94	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-023	Environment Canada recommends the proponent add an assessment of baseline air quality, including GHG's.	Section 5.6.4 includes the requirement for an air quality baseline study. GHG's are identified as a VC for the climate change assessment (Section 4.3, Table 3).	None proposed.
95	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-024	Environment Canada recommends the proponent provide baseline modelling data along with any planned or proposed environmental effects modelling data. This will provide reviewers with the information necessary to assess validity and quality of data submitted.	All baseline reports will be included as appendices to the EAC Application/EIS, including methodologies for assessing baseline conditions. The EAC Application/EIS will include actual periods of recording and how the data was used to inform modelling.	None proposed.
96	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-025	Environment Canada recommends adding wildlife species as defined by the Federal <i>Species at Risk Act</i> (SARA) as well as COSEWIC-assessed species be included. The proponent mentions vegetative SARA species, but not wildlife in this section.	Section 5.2 includes federally designated wildlife species.	For clarification, Section 5.2.1 revised as follows: "For the purposes of this assessment, wildlife resources refer to wildlife species, including provincially and federally (<i>Species at Risk Act</i> (SARA) and <i>Committee on the Status of Endangered Wildlife in Canada</i> (COSEWIC)) designated species and their habitats potentially affected by the Proposed Project."

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97	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-026	<p>The Federal Policy on Wetland Conservation (FPWC) applies to federal departments addressing the potential loss of wetlands and wetland functions. For projects on non-federal lands and waters, such losses are evaluated in terms of the scope of any federal permits, licenses, authorizations and other instruments under federal jurisdiction which may be applicable. The FPWC is underpinned by a no-net-loss of wetland functions objective, and as such, necessitates a consideration of all wetland functions which could be impacted including those functions pertinent to Environment Canada's responsibilities for the protection of migratory birds and species at risk.</p> <p>The purposes of the Species at Risk Act (SARA) are to prevent or reduce the likelihood of wildlife species from becoming extinct or extirpated, to provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity, and to manage species of special concern to prevent them from becoming endangered or threatened.</p> <p>Section 79 of SARA pertains to situations where a person is required by a federal Act to ensure that an assessment of the environmental effects of a project is conducted. Subsection 79(1) requires every such person to notify the competent Minister(s) without delay if the project is likely to affect a listed wildlife species or its critical habitat. Subsection 79(2) of SARA requires that person to identify the adverse effects of the project on the listed wildlife species and its critical habitat; and, if the project is carried out, to ensure that measures are taken to avoid or lessen those adverse effects and to monitor them, and to ensure that such measures are taken in a way that is consistent with any applicable recovery strategy and action plans. Subsection 79(3) defines 'person' as including an association or organization, and a responsible authority as defined in subsection 2(1) of the CEEA.</p> <p>In managing a project in the context of SARA-listed species, proponents are advised to identify and evaluate likely species occurrences (including methods such as conducting baseline surveys), assess environmental impacts, develop mitigation strategies and follow-up monitoring plans.</p>	Acknowledged.	None proposed.
98	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-027	<p>Environment Canada recommends extending the RSA for wildlife and vegetation VC's to the marine RSA as outlined in Figure 7 of the dAIR. The marine route for shipping the barges with the aggregate product should be part of the spatial boundaries for assessing impacts to wildlife such as birds.</p>	<p>The terrestrial RSA covers 30,034 hectares (ha), comprising the McNab Creek watershed and is large enough to encompass seasonal home ranges of large fauna, such as grizzly bear. The RSA covers a scale appropriate for assessing the effects of the Proposed Project on terrestrial wildlife. The marine RSA was assessed separately and specifically focusses on marine species including marine birds. To effectively assess terrestrial and marine VCs, two separate regional study areas have been established.</p> <p>The marine RSA will be used as the spatial boundary for assessing potential effects on migratory seabirds (VC Migratory Marine Birds).</p>	Revised Marine RSA presented in Figure 5.
99	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-028	<p>Environment Canada recommends adding baseline conditions as one of the temporal boundaries stated in the third paragraph.</p>	<p>For the purpose of the assessment, the temporal boundary is defined by the phases of the Proposed Project (construction, operation, reclamation and closure)</p>	None proposed.
100	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-029a	<p>In developing the baseline, Environment Canada recommends applicable standards be applied (as appropriate to project LSA/RSA) to the following: bats; swifts and swallows; woodpeckers; nighthawks; marsh birds; riverine birds (Harlequin Duck/Dipper); snakes; terrestrial arthropods; and Tailed Frog.</p>	<p>Acknowledged.</p> <p>The wildlife species suggested by Environment Canada will be considered in the baseline and effects assessment. Applicable standards will be applied in developing the baseline for wildlife VCs.</p>	None proposed.
101	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-029b	<p>Consultation with the regional office of the Ministry of Forests, Lands & Natural Resource Operations is recommended for species under its management jurisdiction.</p>	<p>Acknowledged.</p> <p>Biologists within FLNRO and MOE have been consulted to assist in the selection of VCs and to obtain species specific information for inclusion in the effects assessment and habitat suitability index (HSI) modeling.</p> <p>The EAC Application/EIS will include documentation of agency consultation activities undertaken and proposed.</p>	None proposed.
102	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-029c	<p>Environment Canada also recommends the Rare Plant Survey include non-vascular plants and lichen. Survey timing is critical, and must be appropriate for all known or potentially occurring provincial and/or federal plants of the LSA/RSA. Limitations of the data collected should also be described.</p>	<p>Acknowledged. Section 5.2 Terrestrial Wildlife and Vegetation includes provisions for rare plant surveys (VC Rare Plants)</p>	None proposed.

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103	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-030	For wetlands in the LSA/RSA, and in developing the baseline, Environment Canada recommends a wetland functions assessment be completed. For guidance, the Proponent should refer to Hanson et al. (2008) 'Wetland Ecological Functions Assessment: An Overview of Approaches' (accessible at: http://wetkit.net/docs/WA_TechReport497_en.pdf). Other resources include: 1) Government of Canada (1991), Federal Policy on Wetland Conservation. Environment Canada. Accessible at: http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=BBAAE735-EF0D-4F0B-87B7-768745600AE8 ; 2) Federal Policy on Wetland Conservation Implementation Guide for Federal Land Managers. Accessible at: https://www.ec.gc.ca/Publications/default.asp?lang=En&xml=6AD07CA9-1DDD-4201-ACCF-B18E41FCB350 ; 3) Wetland Mitigation in Canada – A Framework for Application. Issues Paper, No. 2000-1. North American Wetlands Conservations Council (Canada). Accessible at: http://www.wetlandscanada.org/pubs.html . Environment Canada also requests information on baseline development for bats (roosts/hibernacula).	Acknowledged. All baseline reports will be included as appendices to the EAC Application/EIS, including methodologies for assessing baseline conditions for bats.	None proposed.
104	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-031	For migratory birds/SAR, the effects assessment should not be confined to the breeding season, but evaluate species distribution, abundance and habitat use across seasons	Section 5.2.5 Effects Assessment states that the assessment will identify and evaluate potential adverse effects of the Proposed Project on the following components of terrestrial wildlife and vegetation resources, species-at-risk, and important wildlife habitats: - Habitat alteration, loss, and fragmentation; - Estimate direct habitat loss based on project footprint and indirect reduction of habitat suitability based on zone of influence assessment, including potential for effects from alterations to noise and light regimes and habitat fragmentation; - Key life stage requirements of wildlife, focusing on VCs, habitat requirements, such as breeding habitat, ungulate parturition areas, winter range, amphibian breeding areas, raptor nest sites; - Project-related mortality; - Human-wildlife interactions and potential for wildlife population effects, including species population management; and - Landscape alteration as a function of biodiversity and ecosystem function.	None proposed.
105	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-032	With reference to Section 5.2.6, Environment Canada recommends adding best management practices as part of the mitigation measures.	For all components, mitigation measures will include those considered in the design and operation of the Proposed Project, including Best Management Practices, and will include any additional measures, works, processes or features that were not part of the basic features of the Proposed Project.	For clarification, Section 4.6.2 will be revised as follows: "Mitigation measures will include those that are considered in the design and operation of the Proposed Project, <u>including best management practices</u> , and will include any additional measures, works, processes, or features that were not part of the basic features of the Proposed Project."
106	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-033	Environment Canada recommends the proponent expand the proposed LSA and RSA spatial boundaries for Air Quality and Climate Change to be beyond the identified boundaries for other VC's within the Geotechnical and Natural Hazards section. Air sheds can be quite large and interconnected. Considering the proximity to the Greater Vancouver Area, impacts to Air Quality and/or Climate Change could have a different impact than for those Projects located farther from populated areas.	The Spatial Boundaries for Air Quality (Section 5.6.3.2) and Climate Change (Section 5.7.3.2) are defined as follows: LSA - a 20 by 20 km square centred on the aggregate mine's processing plant. The LSA will be extended if sensitive reports (such as residential areas, schools, camps, yacht clubs, etc.) are located along or close to the 20 by 20 km LSA boundary. RSA - encompass the LSA as well as the total route the barges will take from the Proposed Project to the Burnaby or Langley facility.	None proposed.
107	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-034	The proponent indicates that they will "provide an overview of background information, environmental setting and characteristics for each geotechnical and natural hazards VC ". The phrase "...each geotechnical and natural hazards VC " should be added to bullets 3 and 5 of the assessment methods for continuity. In that manner, baseline, potential effects and mitigation are assessed for all VCs.	Acknowledged. Suggested revisions will be made to section 5.3.3.3.	Section 5.3.3.3 has been amended as follows: "- Identify and evaluate potential effects resulting from the interaction between the Proposed Project and the geotechnical/physical environment, including natural extreme weather events (heavy precipitation, flooding, drought, storms, and / or high snow levels) <u>for each geotechnical and natural hazards VC</u> ; - Identify mitigation measures and environmental management strategies to avoid, limit, or otherwise mitigate potential effects of the Proposed Project on the geotechnical/physical environment <u>for each geotechnical and natural hazards VC</u> ."
108	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-035	Environment Canada recommends the proponent outline the studies that will be done for VC's in Geotechnical and Natural Hazards section as stated in Table 3.	Section 5.3.5 Effects Assessment includes provisions for the following studies that will be done for Geotechnical and Natural Hazards VCs: - Stability evaluations of the Proposed Project for both static and seismic cases and consider several options for development / sequencing of the site to confirm facilities are developed in a safe manner; - Evaluation of existing or potential natural hazard conditions which could impact the sequencing of excavation and development of the pit slopes, stockpile locations or heights, and the stability of the adjacent McNab Creek channel sides slopes; and - A review of the potential impact of changes in surface water and groundwater seepage into or from the Project site	None proposed.
109	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-036	Environment Canada recommends the proponent see comment #33 and assess the effects of each VC outlined in that comment.	EC-033 refers to spatial boundaries for the Air Quality and Climate Change assessments. Associated VCs will be assessed.	None proposed.

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110	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-037	In addition to comment #33 and #34, Environment Canada recommends the proponent provide mitigation measures for each VC as laid out in the Geotechnical and Natural Hazards section in Table 3 (including the additional section as mentioned in comment #14)	Section 5.3.6 Mitigation includes the following requirement: The EAC Application/EIS will identify mitigation measures and management strategies to avoid, limit, or otherwise mitigate potential effects of the proposed project on geotechnical and natural hazards. In addition, the application will discuss the effectiveness and limitations of identified mitigation measures and environmental management strategies. Section 5.8 provides for a summary table of potential residual environmental effects, including key mitigation measures.	None proposed.
111	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-038	With reference to Section 5.3.7, Environment Canada recommends the proponent identify and assess any potential impacts the environment may have on the Project and provide mitigation measures if necessary.	Section 11 includes the Federal Information Requirement to assess effects of the environment on the Proposed Project, and to identify mitigation measure to avoid or limit the likelihood and severity of these effects.	None proposed.
112	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-039	Environment Canada requests information on the methodology to be used to assess baseline conditions (i.e. field testing, etc.). This empirical data on surface water should then be used for any modelling done on surface water. This will more clearly identify the assessment of potential effects and provide EC reviewers with appropriate information.	All baseline reports will be included as appendices to the EAC Application/EIS, including methodologies for assessing baseline conditions. The EAC Application/EIS will include actual periods of recording and how the data was used to inform stream flow estimations.	Section 5.4.4 revised as follows: "- Surface water hydrometric monitoring program. <u>Periods of actual stream flow measurements and how this data was used to inform stream flow estimations will be described.</u> "
113	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-040	There is a typo in the sentence starting with "The assessment of effects will identify past, present or (not of) future projects/activities (space in front of activities should be deleted).	Agreed, current wording is unnecessarily complicated and confusing.	The identified phase will be removed from Effects Assessment sections throughout the document.
114	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-041	There is a typo in the second bullet starting with "Describe of....". The sentence should read "Description of...." or "Describe the available..."	Agreed.	Section 5.6.3.3 has been revised as follows: "- Describe of available air quality monitoring data for the LSA and the RSA. Potential air quality networks that will be consulted will include, but not limited to EC's National Air Pollutant Surveillance Network (NAPS), the MOE air quality network and the MFLNRO;"
115	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-042	There is a mis-print with the first sentence within this section. "The assessment will identify....the Proposed Project on the fisheries and aquatic habitat VCs identified in Table 3." The last part of the section referring to fisheries and aquatic habitat is incorrect. This section should state "...the Proposed Project on Air Quality VC as identified in Table 3."	Agreed.	Section 5.6.5 has been revised as follows: "The assessment will identify and evaluate potential adverse effects of all project phases of the Proposed Project on the fisheries and aquatic habitat <u>air quality</u> VCs identified in Table 3."
116	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-042	There is a typo in the sentence starting with "The assessment of effects will identify past, present or (not of) future projects/activities (space in front of activities should be deleted).	Agreed, current wording is unnecessarily complicated and confusing.	The identified phase will be removed from Effects Assessment sections throughout the document.
117	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-043	It should be confirmed that Table 5 as shown on p.56 of the dAIR is an example of the summary of predicted residual environmental effects table, and that the actual table will include all environmental VCs as identified in Table 3 on ps. 19-22	Confirmed that Table 5 in the EAC Application/EIA will include all potential residual effects on identified environmental VCs.	None proposed.
118	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-044	Environment Canada recommends adding current conditions (i.e. current baseline) as one of the temporal boundaries listed in the second paragraph on this page.	For the purpose of the assessment, the temporal boundary is defined by the phases of the Proposed Project (construction, operation, reclamation and closure)	None proposed.
119	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-045	There is a typo in the sentence starting with "The assessment of effects will identify past, present or (not of) future projects/activities (space in front of activities should be deleted).	Agreed, current wording is unnecessarily complicated and confusing.	The identified phase will be removed from Effects Assessment sections throughout the document.
120	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-046	Environment Canada recommends adding the <i>Species at Risk Act</i> and <i>The Federal Policy on Wetland Conservation</i> to the list of legislation and guidelines.	Acknowledged. Suggested revisions will be made to section 7.3.3.3.	Section 7.3.3.3 revised to include: "- Federal Policy on Wetland Conservation - Species at Risk Act"
121	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-047	There is a typo in the sentence starting with "The assessment of effects will identify past, present or (not of) future projects/activities (space in front of activities should be deleted).	Agreed, current wording is unnecessarily complicated and confusing.	The identified phase will be removed from Effects Assessment sections throughout the document.
122	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-048	There is a typo in the sentence starting with "The assessment of effects will identify past, present or (not of) future projects/activities (space in front of activities should be deleted).	Agreed, current wording is unnecessarily complicated and confusing.	The identified phase will be removed from Effects Assessment sections throughout the document.
123	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-049	There is a typo in the sentence starting with "The assessment of effects will identify past, present or (not of) future projects/activities (space in front of activities should be deleted).	Agreed, current wording is unnecessarily complicated and confusing.	The identified phase will be removed from Effects Assessment sections throughout the document.

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124	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-050	There is a typo in the sentence starting with "The assessment of effects will identify past, present or (not of) future projects/activities (space in front of activities should be deleted).	Agreed, current wording is unnecessarily complicated and confusing.	The identified phase will be removed from Effects Assessment sections throughout the document.
125	Glos, Adriana	Environment Canada	15-Apr-13	dAIR 1.0 (22Feb2013)	EC-051	Environment Canada recommends the proponent identify and assess whether noise levels may cause an adverse effect to wildlife around the Project area.	The Terrestrial Wildlife and Vegetation Assessment (Section 5.2.5 Effect Assessment) includes sensory disturbance for wildlife (i.e., "potential for effects from alterations to noise and light regimes").	None proposed.
126	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-001	The process of enlarging the extraction pond and groundwater linkage must be characterized, with respect to potential impacts to the stream hydrological regime and water quality as well as to the habitat and water quality in the intertidal zone.	An extensive groundwater monitoring program and effects assessment modelling has been undertaken for the Proposed Project, including intertidal effects. Section 5.5 addresses the characteristics of the mine plan and potential effects on groundwater movement and volumes.	None proposed.
127	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-002	It is stated that no wash water will be discharged outside the pit and will be contained within the processing facilities and site. However, it is noted that there will be stormwater discharging from the overall site. As well, "liquid discharges (e.g. process water and sewage)" is noted in 2.2.4 Project Emissions, Discharge and Waste. It is therefore unclear what types of effluent/runoff discharges are anticipated/proposed.	No effluent discharges are proposed. Wash water will be processed for removal of fines and silt in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will be supplemented with make-up water by a groundwater well. No wash water will be discharged. Household waste, industrial solid waste, and liquid waste pumped from portable washroom facilities will be barged off-site and disposed of in approved facilities.	Section 2.2.4 revised to include: "- Wash water will be processed for removal of fines and silt in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will be supplemented with make-up water by a groundwater well. No wash water will be discharged. - Household waste, industrial solid waste, and liquid waste pumped from portable washroom facilities will be barged off-site and disposed of in approved facilities."
128	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-003	Detailed information will be needed on the sewage and stormwater treatment facility, with respect to type of treatment, performance measures and outfall location(s).	The EAC Application/EIS will include a description of proposed wastewater treatment and disposal processes and facilities	The following has been added to Section 2.2.4: "The EAC Application/EIS will include a description of proposed wastewater treatment and disposal processes and facilities."
129	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-004	Proposed control of dust and exhaust gases produced by fossil fuel-burning equipment will need to be documented, with performance measures and adaptive management strategies.	Acknowledged. Dust generation and fossil fuel-burning equipment will be considered as part of the air quality assessment. The Construction and Operational Environmental Management Programs described in Section 12 include air quality and dust control plans. Section 13 will be revised to include adaptive management as a feature of the environmental monitoring and follow-up program.	Section 13.0 revised as follows: "- Effectiveness assessment, including adaptive management, of mitigation measures being applied against proposed to mitigate potential environmental effects."
130	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-005	Ongoing monitoring for dust and water quality parameters will also need to be outlined and rationalized. Again, performance measures and adaptive management strategies, for when measures are not achieved, will need to be documented for water quality as well as air quality. The whole process will need to be shown in an adaptive management framework, complete with effectiveness evaluations of any mitigative steps taken.	Acknowledged. Section 13 will be revised to include adaptive management as a feature of the environmental monitoring and follow-up program.	Section 13.0 revised as follows: "- Effectiveness assessment, including adaptive management, of mitigation measures being applied against proposed to mitigate potential environmental effects."
131	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-006	Under 2.8 Applicable Permits and Approvals, it is noted that the MoE Environmental Protection Division requirements can include Waste Discharge Authorizations for the generation of liquid, gaseous or solid waste. Some reference should also be made that pollution as defined under EMA cannot be caused.	Acknowledged. Table 2 will be revised to reflect BCMOE-EPD's role in preventing pollution.	Table 2 has been revised as follows: " <u>Pollution prevention</u> . Waste Discharge Authorizations. Generation of liquid, gaseous or solid waste. "
132	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-007	Table 3 - 'fish species are appropriate sentinels...' Higher trophic level organisms such as fish may not be good sentinels for direct impacts, especially in the short term. Invertebrates as sentinels could strengthen the resulting environmental impact assessment process, in both the freshwater and marine environments.	Acknowledged that the use of benthic invertebrates and periphyton often provide meaningful indices for monitoring change in aquatic environments. Marine benthic invertebrates have been collected as part of the marine surveys. No freshwater benthic invertebrate monitoring was undertaken given the large variation in hydrograph in all streams and creeks surrounding the site. Initial surveys of benthic invertebrates indicated limited homogenous environments to monitor invertebrates in freshwater in a statistically robust manner. Complete periods of dry conditions were observed in all streams and creeks in the area including McNab Creek. Ongoing forest harvesting activities in the entire watershed, peak flood events, and low flow events will have strong impacts on freshwater benthic invertebrate density and community structure.	None proposed.
133	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-008	Particle size composition, coupled with chemical analyses, could be a good monitoring parameter for marine sediments. There may be some value in determining how much of the particle material is organic versus non-combustible. Before/after data for these tests could correlate with the proposed benthic invertebrate monitoring.	Acknowledged. Organic/non-combustible ratios of particle material and correlation with benthic invertebrate monitoring will be considered.	None proposed.
134	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-009	Water quality monitoring in surface fresh and marine waters may require additional monitoring. In surface water systems, substrate sedimentation could be added, focusing on particle size composition, while in marine surface waters, extinction depth measurements (simply using a Secchi disc) may also prove useful.	Acknowledged. Additional monitoring will be considered in developing the environmental monitoring and follow-up program.	None proposed.
135	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-010	In addition to using BC and National air quality objectives as performance measures, there should also be a linkage to the Sea to Sky Clean Air Society's Airshed Management Plan.	Sea-to-Sky Air Quality Management Plan (SSAQMP) has been added as rationale for Air Quality VC in Table 3	Table 3 revised to include: "- Relevant air quality indicators and targets specified in the Sea-to-Sky Air Quality Management Plan (SSAQMP);"

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136	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-011	The Duration and Frequency discussion defines short-term, medium-term and long-term with respect to project phases. Instead, the duration and frequency aspects of environmental impacts should use scientific definitions, as quantified by Newcombe with his Severity of Ill Effects approach for total suspended solids and turbidity levels.	Accepted assessment methodology contemplates short, medium, long term as criteria for duration and frequency of potential effects.	None proposed.
137	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-012	Cumulative Effects Assessments may not be effectively addressed by simply comparing monitoring data to water quality guidelines/objectives. Chronic toxicity or other testing should also be considered.	Acknowledged. Mining and processing aggregate does not involved chemical treatment or generation of contaminants. No effluent will be generated from the mine. Geochemical testing and modelling has been undertaken to define potential ARD and toxicity issues. None have been observed.	None proposed.
138	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-013	In Table 4: Cumulative Projects and Activities under Consideration, we would suggest adding the impacts from log booming operations and past, present and possible future industrial activities at the Woodfibre mill location.	Agreed. Table 4 has been revised to include log boom operations and the potential development of WFP Woodfibre Mill.	Revise Table 4 to include past log storage activities and potential future redevelopment of the WFP Woodfibre Mill.
139	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-014	In Spatial and Temporal Boundaries , it should be recognized that the geographic boundaries of environmental impact assessment would be expanded, if necessary, to the point where background (pre development) conditions are met.	Acknowledged. Section 4.4 will be revised to indicate that geographic study area boundaries my need to be expanded to the point where background conditions are met.	Section 4.4 revised to include: "Geographic study area boundaries may need to be expanded to the point where background conditions are met."
140	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-015	There is a need to compare control conditions to operating and post-operation conditions. Control conditions can be attained either spatially (eg, upstream of an operations area) or temporally (sampling at a site prior to development, that will later be a 'downstream' site.	Acknowledged. Comparison of operating and post-operating conditions to control conditions will be part of the environmental monitoring and follow-up program.	None proposed.
141	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-016	A key aspect in any assessment of environmental effects is to develop meaningful performance measures or environmental endpoints. Water and air quality guidelines or objectives are useful in many areas, but some measurements or characterizations of environmental quality will not have established endpoints available for adoption.	Acknowledged. Assessment endpoints for each environmental component will be clearly presented as consequence criteria as part of the assessment methods.	None proposed.
142	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-017	The need for Effectiveness Evaluations of the mitigative measures taken needs to be identified as an additional step in the adaptive management framework. ensure that the most emphasis is placed on erosion prevention to minimize sedimentation to streams and marine foreshore areas. for example, sloped areas should not be grubbed and disturbed during the wet weather seasons since it is impossible to control soil loss during west coast storm events. Mitigation measures need to be established ahead of time; problems with siltation, erosion, and sedimentation need to be anticipated and budgeted for.	The Construction and Operational Environmental Management Programs described in Section 12 include sediment, erosion and drainage control plans. Section 13 will be revised to include adaptive management as a feature of the environmental monitoring and follow-up program.	Section 13.0 revised as follows: "- Effectiveness assessment, <u>including adaptive management</u> , of mitigation measures being applied against proposed to mitigate potential environmental effects."
143	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-018	Address the hydrologic responses during precipitation events, as land use changes could impact on the response.	Geotechnical and natural hazards effects assessment to include potential effects of natural extreme weather events (heavy precipitation, flooding, drought, storms, and / or high snow levels). The EAC Application/EIS will include an Environmental Management Programme that included Sediment, Erosion and Drainage Control and Water Management (including flood hazard management) Plans for construction and operational phases of the Project.	Section 5.3.3.3 has been amended as follows: "- Identify and evaluate potential effects resulting from the interaction between the Proposed Project and the geotechnical/physical environment, <u>including natural extreme weather events (heavy precipitation, flooding, drought, storms, and / or high snow levels)</u> , for each geotechnical and natural hazards VC; "
144	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-019	The Construction and Operational Environmental Management Programs should be submitted to the EAO and agencies for review and approval prior to issuance of the certificate.	Conceptual construction and operational environmental management plans will be included in Section 12 of the EAC Application/EIS.	None proposed.
145	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-020	Comment: The Project is located within the boundaries of the Sea-to-Sky Airshed and has the potential to affect local and regional air quality. Management of airshed emissions and air quality is guided by the <i>Sea-to-Sky Air Quality Management Plan</i> (SSAQMP). The overall focus of the SSAQMP is to maintain and improve on the existing good air quality within the airshed. Documents related to the SSAQMP are available from the Sea-to-Sky Clean Air Society's website at http://seatoskyairquality.ca/air-quality/planning/). The Proponents should review the SSAQMP and its companion implementation framework document and clearly demonstrate that the proposed project integrates and aligns with the Goals, Indicators, Targets and Actions of the SSAQMP. Where impacts or conflicts are identified the Proponent should document how these impacts or conflicts will be resolved.	Acknowledged.	Section 5.6.2 revised as follows: "The EAC Application/EIS will provide a brief summary of any legislation, regulation or policy related to air quality VCs, <u>including the Sea-to-Sky Air Quality Management Plan (SSAQMP) and its companion implementation framework.</u> "
146	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-021	Table 3 - Air Quality – comparable thresholds should also include the Air Quality Indicators and Targets identified in the SSAQMP including Health Reference Levels (PM10 & PM2.5); Canada-wide Standards (PM2.5); and Continuous Improvement (PM10, PM2.5 & NO2)	Sea-to-Sky Air Quality Management Plan (SSAQMP) has been to rationale for Air Quality VC in Table 3	Table 3 revised to include: "- Relevant air quality indicators and targets specified in the Sea-to-Sky Air Quality Management Plan (SSAQMP);"
147	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-022	Table 3 - Air Quality – visual air quality should also be included (e.g. potential effects of PM emissions on scenic vistas from fugitive dust)	The need for visual air quality assessment was discussed with BCMOE in reviewing the detailed model plan on May 27, 2013. It was agreed that a qualitative statement on visibility would be appropriate since since only low level fugitive emissions are anticipated (i.e., no stacks or large plumes) and there are no specific visibility assessment criteria.	Section 5.6.5 revised to as follows: " <u>A qualitative assessment of the potential for visual air quality degradation will be presented.</u> "

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148	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-023	Table 3 - Climate Change - comparable GHG thresholds should also include the Air Quality Indicators and Targets identified in the SSAQMP	Acknowledged. Table 3 revised to include relevant indicators and targets specified in the SSAQMP.	Table 3 revised to include: "- Relevant air quality indicators and targets specified in the SSAQMP; and"
149	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-024	Table 4 - Past or Present – Howe Sound Pulp & Paper uses biomass fuel for Power Boiler (occasional natural gas) BUT there are additional emission sources (Recovery Boiler, Lime Kiln, Smelt Dissolving Tank) using other fuels (Black Liquor, natural gas).	Acknowledged. Table 4 revised to include additional emission sources.	Table 4 revised to include: "- Additional emission sources (recovery boiler, lime kiln, smelt dissolving tank) use other fuels (black liquor, natural gas)."
150	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-025	Table 4 - Reasonably Foreseeable - the proposed LNG facility at former Woodfibre location near Squamish should be considered. It fits the definition for inclusion in the 'screening process' as outlined on Page 27, Paragraph 3), 2nd Bullet: "Have not entered a formal process but that have been discussed publicly by proponents..."	Agreed. Table 4 has been revised to include log boom operations and the potential development of WFP Woodfibre Mill.	Revise Table 4 to include past log storage activities and potential future redevelopment of the WFP Woodfibre Mill.
151	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-026	The assessment should include a review of the SSAQMP and its Implementation Framework document (see General Comment above)	Acknowledged.	Section 5.6.2 revised as follows: "The EAC Application/EIS will provide a brief summary of any legislation, regulation or policy related to air quality VCs, including the Sea-to-Sky Air Quality Management Plan (SSAQMP) and its companion implementation framework."
152	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-027	Add the Air Quality Indicators and Targets identified in the SSAQMP including Health Reference Levels (PM10 & PM2.5); Canada-wide Standards (PM2.5); and Continuous Improvement (PM10, PM2.5 & NO2)	Acknowledged. Table 3 revised to include relevant indicators and targets specified in the SSAQMP.	Table 3 revised to include: "- Relevant air quality indicators and targets specified in the SSAQMP; and"
153	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-028	Add visual air quality	The need for visual air quality assessment was discussed with BCMOE in reviewing the detailed model plan on May 27, 2013. It was agreed that a qualitative statement on visibility would be appropriate since since only low level fugitive emissions are anticipated (i.e., no stacks or large plumes) and there are no specific visibility assessment criteria.	Section 5.6.5 revised to as follows: "A qualitative assessment of the potential for visual air quality degradation will be presented."
154	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-029	From an emissions assessment perspective, spatial boundaries should include the province of BC and the Sea-to-Sky Airshed (see Section 5.6.5, bullet 2 below).	Detailed Model Plan submitted to BCMOE contemplates a spatial boundary to where air quality indicators reach background levels. Potential effects will be assessed relative to prevailing air quality objectives for BC and the Sea-to-Sky Airshed, as appropriate.	Section 5.6.3.5 revised as follows: The RSA will encompass the proposed shipping routes to and from the Proposed Project site through Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel, to the north arm of the Fraser River and extend to where air quality indicators reach background levels. Potential effects will be assessed relative to prevailing air quality objectives for BC and the Sea-to-Sky Airshed, as appropriate. the LSA as well as the total route the barges will take from the Proposed Project to the Burnaby or Langley facility. The temporal boundaries for the assessment will include the phases of the Proposed Project: construction, operations, reclamation, and closure.
155	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-030	The potential effects on implementation of the SSAQMP should be included	Acknowledged.	Section 5.6.3.3. has been revised as follows: "- Identify and evaluate potential effects of the Proposed Project on the implementation of the SSAQMP and on maintaining air quality and climate conditions that are consistent with both provincial and federal standards and quality-of-life related issues; and
156	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-031	Error in first sentence - "...fisheries and habitat VC's..." should be replaced with air quality VC's	Agreed.	Section 5.6.5 has been revised as follows: "The assessment will identify and evaluate potential adverse effects of all project phases of the Proposed Project on the fisheries and aquatic habitat air quality VCs identified in Table 3."
157	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-032	Emissions for all Project phases should be assessed in the context of the 2005 provincial emissions inventory (available at http://www.bcairquality.ca/reports/2005_emissions_inventory.html) and the 1995 Sea-to-Sky airshed CAC emission inventory (available at: http://www.bcairquality.ca/reports/emiss_inven_rep.html). Placing emissions within the Sea-to-Sky Airshed context will assist in the determination of the need for dispersion modelling and the type of modelling required.	Acknowledged.	Section 5.6.4 revised as follows: "Review of existing air quality data available in the area of the site (i.e., most recent provincial emissions inventory (BCMHL 2009) and Sea-to-Sky Airshed Emissions Inventory of Common Air Contaminants (Pitre 2002)), and identification of what further air quality data would be required to determine baseline conditions. Should no such data be available, baseline monitoring of compounds such as sulphur dioxide (SO2), nitrogen dioxide (NO2), total suspended particulate (TSP), particulate matter less than 10 micron (PM10), particulate matter less than 2.5 micron (PM2.5), and dustfall may be required.
158	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-033	The potential for visual air quality degradation should also be considered. Initially this may be on a qualitative basis as an initial screening, followed by a quantitative analysis if deemed necessary.	The need for visual air quality assessment was discussed with BCMOE in reviewing the detailed model plan on May 27, 2013. It was agreed that a qualitative statement on visibility would be appropriate since since only low level fugitive emissions are anticipated (i.e., no stacks or large plumes) and there are no specific visibility assessment criteria.	Section 5.6.5 revised to as follows: "A qualitative assessment of the potential for visual air quality degradation will be presented."
159	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-034	The decisions on whether dispersion modelling is required and, if deemed necessary, the type of modelling and VC's to be modelled, should be made in consultation with the agencies involved in air quality management. Given the degree of public attention garnered by this project, it is highly likely that modelling of emissions will be required. Early consultation with MoE staff is encouraged. Whatever the outcome of such decision making, the rationale and supporting information will need to be clearly articulated.	Acknowledged. The Air Quality Assessment Team has consulted with BCMOE staff and has provided a dispersion model plan for review and approval.	None proposed.

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160	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-035	<ul style="list-style-type: none"> The assessment should include a review of the SSAQMP and its Implementation Framework document (see General Comment above) The Proponents should contact the BC Climate Change Secretariat (http://www.env.gov.bc.ca/cas/index.html) for the most up-to-date information on GHG policy and data. 	<p>Acknowledged.</p> <p>The Climate Action Secretariat (CAS) will be consulted. The EAC Application/EIS will include documentation of agency consultation activities undertaken and proposed.</p>	<p>Section 5.7.2 revised as follows: "The EAC Application/EIS will provide a brief summary of any legislation, regulation or policy related to climate change VCs, including the Sea-to-Sky Air Quality Management Plan (SSAQMP) and its companion implementation framework."</p>
161	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-036	Add the Air Quality Indicators and Targets identified in the SSAQMP	<p>Acknowledged. Table 3 revised to include relevant indicators and targets specified in the SSAQMP.</p>	<p>Table 3 revised to include: "- Relevant air quality indicators and targets specified in the SSAQMP; and"</p>
162	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-037	From an emissions assessment perspective, spatial boundaries should include the Sea-to-Sky Airshed (see Section 5.7.5 below)	<p>Detailed Model Plan submitted to BCMOE contemplates a spatial boundary to where air quality indicators reach background levels. Potential effects will be assessed relative to prevailing air quality objectives for BC and the Sea-to-Sky Airshed, as appropriate.</p>	<p>Section 5.7.3.5 revised as follows: The RSA will encompass the proposed shipping routes to and from the Proposed Project site through Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel, to the north arm of the Fraser River and extend to where air quality indicators reach background levels. Potential effects will be assessed relative to prevailing air quality objectives for BC and the Sea-to-Sky Airshed, as appropriate. the LSA as well as the total route the barges will take from the Proposed Project to the Burnaby or Langley facility. The temporal boundaries for the assessment will include the phases of the Proposed Project: construction, operations, reclamation, and closure.</p>
163	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-038	The Provincial 2010 GHG inventory report (available at: http://www.env.gov.bc.ca/cas/mitigation/ghg_inventory/pdf/pir-2010-full-report.pdf) may be an additional source of information	<p>Acknowledged.</p>	<p>Section 5.7.3.3. has been revised as follows: "- Describe Regional and local greenhouse gases (GHG) emission sources, will be extracted from Environment Canada's most recent National Pollutant Release Inventory (NPRI) and from the Province of British Columbia's most recent GHG inventory report (BCMOE 2012);"</p>
164	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-039	The potential effects on implementation of the SSAQMP should be included	<p>Acknowledged.</p>	<p>Section 5.7.3.3. has been revised as follows: "- Identify and evaluate potential effects of the Proposed Project on the implementation of the SSAQMP and on GHG emission rates within the LSA and RSA; and"</p>
165	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-040	Emissions for all Project phases should also be assessed in the context of the Sea-to-Sky Airshed. The SSAQMP defined the 2007 BC Community Energy and Emissions Inventory (CEEI) as the baseline year for airshed comparisons and tracking of Air Quality Indicator #3 which has as its goal, a decreasing trend from the baseline year of 2007.	<p>Acknowledged.</p>	<p>Section 5.7.3.3. has been revised as follows: "- Identify and evaluate potential effects of the Proposed Project on the implementation of the SSAQMP and on GHG emission rates within the LSA and RSA; and"</p>
166	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-041	The draft AIR does not mention any vegetative clearing for development of the Project. However, if any land clearing and subsequent burning of vegetative debris is contemplated, compliance with the provincial Open Burning Smoke Control Regulation (available at http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/34_145_93) is required and all reasonable alternatives to burning should be explored.	<p>Acknowledged. A Preliminary List of Required Permits and Approvals is presented in Section 2.8 (Table 2).</p>	<p>For clarification, the Open Burning Smoke Control Regulation has been included in Table 2 should land clearing and subsequent burning of vegetative debris be contemplated</p>
167	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-042	The proponent is strongly encouraged to develop and submit the EMPs related to construction and operations for review and comments as soon as possible.	<p>Conceptual construction and operational environmental management plans will be included in Section 12 of the EAC Application/EIS.</p>	<p>None proposed.</p>
168	Moore, Brent	Ministry of Environment, Environmental Protection	12-Apr-13	dAIR 1.0 (22Feb2013)	MOE-EP-043	Geo-referenced records of contaminated sites in the general area identify only two, located approximately 2.5 km to the northeast of the proposed project location (SITE Nos. 4061 and 5312). Information regarding the Ministry of Environment's land remediation regulatory framework including technical guidance for site investigation/assessment may be found at the following website: http://www.env.gov.bc.ca/epd/remediation .	<p>Acknowledged.</p>	<p>None proposed.</p>
169	Information forwarded by Vivian Au (CEAA)	Fisheries and Oceans Canada	23-Apr-13	dAIR 1.0 (22Feb2013)	DFO-001	If the Proponent is wishing DFO to consider a concurrent Section 35(2) Authorization under the Federal Fisheries Act, DFO recommends the EIS include information to support an application for Authorization, including but not limited to; final construction plans which include relevant design drawings; final fish habitat assessments; total impact areas to fish and fish habitat (based on construction, operations and decommissioning activities); final environmental management plan that details all mitigation to avoid impacts and monitoring report structure for construction and the use of environmental monitoring during key development phases; final fish habitat compensation plan including long term monitoring plan; cost estimate to construct and monitor fish habitat compensation plan, and First Nation consultations of final fish habitat compensation plan.	<p>Acknowledged. The requested information will be prepared to support a Section 35(2) Authorization. This information will be consistent with the effects assessment and proposed mitigation plans presented in the EAC Application/EIS, but may require an additional level of detailed project design and compensation habitat planning than would be required for the EA.</p>	<p>None proposed.</p>
170	Information forwarded by Vivian Au (CEAA)	Fisheries and Oceans Canada	23-Apr-13	dAIR 1.0 (22Feb2013)	DFO-002	The Local Study Area for the identified Valued Component – Anadromous salmon should include the utilization of the nearshore marine habitats and freshwater tributaries of the McNab River estuary to appropriately consider salmonid smolt outmigration. Recommend the EIS identify all project components such as water management structures, that may pose an impact to these habitats during the life of the mine.	<p>The fisheries and aquatic habitat assessment local study area will include nearshore marine habitats and freshwater tributaries of McNab Creek to appropriately consider salmonid smolt outmigration.</p> <p>The potential effects of all project components (including water management structures) will be assessed.</p>	<p>Section 5.1.3.2 of the EAC Application/EIS has be revised to include: "- Streams, groundwater channels and other waterbodies that are freshwater tributaries to McNab Creek;"</p>
171	Information forwarded by Vivian Au (CEAA)	Fisheries and Oceans Canada	23-Apr-13	dAIR 1.0 (22Feb2013)	DFO-003	Site information utilized to present summarized information in the application should be appended to the application.	<p>Detailed baseline study reports will be included as appendices to the EAC Application / EIS.</p>	<p>For clarification, Section 18 revised as follows: "This section will include the appendices referenced in the EAC Application/EIS, including detailed baseline studies."</p>

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172	Information forwarded by Vivian Au (CEAA)	Fisheries and Oceans Canada	23-Apr-13	dAIR 1.0 (22Feb2013)	DFO-004	The second paragraph references main effects of the proposed Project but does not mention loss of habitat provided by the existing fish compensation channel within the proposed mine footprint. Recommend the dAIR/EIS remove reference to main impacts and simply list all the anticipated impacts to Fish and Fish Habitat.	dAIR/EIS will be revised as suggested include a list of potential effects on fisheries and fish habitat that will be assessed.	Section 5.1.5 revised to include the following: "Potential effects on fisheries and aquatic habitat that will be assessed include: - Habitat alteration, loss and fragmentation (including loss of habitat provided by the upper constructed groundwater channel within the proposed mine footprint, currently predicted to occur at year 7 of Proposed Project operations); - Direct and indirect effects to fish due to changes in water chemistry and thermal regime of habitat; - Productive capacity of fish habitat; - Seasonality of fish utilization and fish-bearing status of potentially affected streams; - Benthic ecology within the marine LSA; and - Direct and indirect effects on marine mammals and birds associated with shipping activities, including underwater noise."
173	Information forwarded by Vivian Au (CEAA)	Fisheries and Oceans Canada	23-Apr-13	dAIR 1.0 (22Feb2013)	DFO-005	Recommend this section should clearly outline a risk analysis that considers the potential impacts to fish and fish habitat from Project developments in consideration of the risks and uncertainties associated with those developments. The analysis should include consideration of natural hazards, hydrologic modelling and surface water hydrology.	The effects assessment methodology proposed in Section 4.7.3 reflects a risk analysis approach based on the probability that an effect will occur (low, med, high) and the consequence of a given potential effect (negligible, minor, moderate, major) to determine the significance rating (negligible, low, moderate, high). The level of predicted confidence will also be discussed. Contingency plans will be presented in the EAC Application/EIS if there are notable uncertainties or risks associated with predictions. The assessment of potential effects on fisheries and aquatic habitat presented in this section will include potential effects of natural hazards and will integrate results of hydrological predictive modelling and with surface water hydrology results.	None proposed.
174	Information forwarded by Vivian Au (CEAA)	Fisheries and Oceans Canada	23-Apr-13	dAIR 1.0 (22Feb2013)	DFO-006	To assist DFO in understanding how predictions of stream flow for the various streams within the project study area have been derived, DFO recommends the application identify the period of record where actual stream flow data has been collected for the various streams within the study area. Discussion on how this data is used to inform stream flow estimations should be provided within the application.	The EAC Application/EIS will include actual periods of recording and how the data was used to inform stream flow estimations.	Section 5.4.4 revised as follows: "- Surface water hydrometric monitoring program. <u>Periods of actual stream flow measurements</u> and how this data was used to inform stream flow estimations will be described."
175	Simpson, Courtney	Islands Trust Northern Office	3-May-13	dAIR 1.0 (22Feb2013)	ITNO-001	The proponent should be required to explore alternative transportation options including overland gravel transport to avoid the need to ship by water.	An evaluation of alternate means of undertaking the project will be included.	Section 2.5 revised as follows: "- an analysis of alternative means of undertaking the Proposed Project (including alternative transportation options) that are technically and economically feasible."
176	Simpson, Courtney	Islands Trust Northern Office	3-May-13	dAIR 1.0 (22Feb2013)	ITNO-002	Under 2.6 Proposed Project Land Use, the EAC Application/EIS should include a description of Gambier Local Trust Area Official Community Plan policies, and Islands Trust Policy Statement.	The EAC Application/EIS will include a description of relevant Gambier Local Trust Area Official Community Plan policies, and the Islands Trust Policy Statement.	Section 2.6 revised as follows: "- identification of any relevant Official Community Plans (including the Gambier Local Trust Area Official Community Plan), associated policies, Islands Trust Policy Statements, and regional government plans."
177	Simpson, Courtney	Islands Trust Northern Office	3-May-13	dAIR 1.0 (22Feb2013)	ITNO-003	When measuring air quality, ensure that vessel emissions are measured and future emissions predicted.	Dispersion modelling will be conducted for the project. The dispersion model has been developed in consultation with the BC Ministry of Environment and in accordance with the Guidelines for Air Quality Dispersion Modeling in British Columbia (BCMOE, 2008). Shipping emissions will not be modelled; instead, they will be calculated and quantitatively compared to the Lower Fraser Valley Emissions Inventory.	None proposed.
178	Simpson, Courtney	Islands Trust Northern Office	3-May-13	dAIR 1.0 (22Feb2013)	ITNO-004	Environmental impact on key species such as eel-grass, forage fish and cetaceans (especially from increased barge movement) needs to be emphasized and appropriate studies provided;	Valued components that will be the focus of the effects assessment are presented in Table 3. These include critical species and associated habitat. The potential effects of barging on identified VCs will be assessed.	For clarification, Section 5.1.4 has been revised as follows: "- Assessment of marine mammals (including cetaceans and pinnipeds) whose known distribution overlaps within the LSA and RSA will be conducted through a literature review, " "- Maps showing all fish habitats (including eelgrass beds), sampling locations, and sampling results."
179	Simpson, Courtney	Islands Trust Northern Office	3-May-13	dAIR 1.0 (22Feb2013)	ITNO-005	Proponent should address the gap relating to assessing the potential impact on economic activity such as tourism and recreation which may result from the mine;	Recreation and tourism is a valued component to be included as part of the social effects assessment.	None proposed.
180	Simpson, Courtney	Islands Trust Northern Office	3-May-13	dAIR 1.0 (22Feb2013)	ITNO-006	Assess what impact the mine (including barge activity and potential accidents) could have on the on-going recovery of Howe Sound	The potential effects of the project (including barging) on local and regional study areas within Howe Sound will be assessed. Measures will be proposed to avoid potential adverse effects on Howe Sound and its ongoing recovery.	None proposed.
181	Simpson, Courtney	Islands Trust Northern Office	3-May-13	dAIR 1.0 (22Feb2013)	ITNO-007	Assess what impact the mine (including barge activity and potential accidents) could have on the on-going recovery of Howe Sound	The EAC Application/EIS will include an assessment of potential effects of accidents, malfunctions and unplanned events, and describe how these would be managed and/or mitigated.	None proposed.
182	Simpson, Courtney	Islands Trust Northern Office	3-May-13	dAIR 1.0 (22Feb2013)	ITNO-008	Evaluation of the beach area to be affected for forage fish spawning potential should be done.	Valued components that will be the focus of the effects assessment are presented in Table 3. These include critical species and associated habitat. The potential effects of project activities on identified VCs within the local and regional study areas will be assessed.	None proposed.

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183	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-001	It is a glaring oversight and offensive to the Squamish Nation that the 'site history' recorded in the Application/EIS should begin with logging circa 1900. There is evidence of Squamish having used and occupied Howe Sound, among other areas, going back thousands of years. An accurate site history must address this use and occupation, in a manner acceptable to the Squamish.	Text has been updated in response to this comment. This section is intended to provide a brief overview of the history of industrial interests at the site. A fuller review of land and resource use relative to the project area will be included in Section 7.3, Non-Traditional Land and Resource Use, and Part C, First Nations Information Requirements.	For clarification, Section 2.2.1.1 has been changed from "Site History" to "Industrial Site History."
184	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-002	It is stated that the wetted pit will be filled with natural groundwater input. This assumption should be confirmed with field studies to ensure that surface flow from McNab Creek will not be captured by the pit.	Acknowledged. Section 13 Environmental Monitoring and Follow-up Programs will include a monitoring and reporting structure to verify the accuracy of the environmental assessment, including the implementation of measures taken to mitigate adverse environmental effects.	None proposed.
185	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-003	The consequences of the proposed use of the groundwater channel to recharge the pit pond should be scoped into the groundwater and aquatic habitat studies.	The potential effects of blocking a portion of the groundwater channel (in approximately year 6) to re-charge the pit pond is within the scope of the groundwater resource and fisheries and aquatic habitat studies and will be assessed.	None proposed.
186	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-004	The impacts of the hydraulic training berm (past and proposed additional works) should be scoped into the physical (groundwater resources) and aquatic habitat studies (compensation channel habitat)	The use of the hydraulic training berm as a component of the Proposed Project is within the scope of the groundwater resource and fisheries and aquatic habitat studies and will be assessed.	None proposed.
187	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-005	It seems surprising that a DFO study would assess whether an aggregate mine plan is possible for the site. Please provide a full citation (there is no reference list for this dAIR) for the DFO paper, and/or make it available to interested parties. The last sentence in this paragraph is incomplete.	Text has been updated in response to this comment.	Section 2.2.3.1 has been revised as follows: Preliminary studies in 2010 (Golder 2010a, 2010b, 2010c, 2010d, 2010e, 2010f, 2010g, 2010h, 2010i), an independent hydrogeologic review prepared for DFO (Elanco 2011) independent review in 2010 (DFO 2010), and ongoing studies in support of the EA to 2013 , indicate that an aggregate mine plan is feasible for at the site. References have been included in Section 17 References.
188	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-006	The placement of overburden around the training berm should be scoped into the hydrology and aquatic habitat studies.	The placement of overburden as a component of the Proposed Project is within the scope of the groundwater resource and fisheries and aquatic habitat studies and will be assessed.	None proposed.
189	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-007	Please confirm that wash water will be discharged to the pit. Will there be any sediment treatment before that discharge?	Wash water will not be discharged into the pit lake. It will be processed for removal of fines and silt in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will be supplemented with make-up water by a groundwater well. The recycled wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities.	Section 2.2.3.2 revised as follows: "Wash water will be processed for removal of fines and silt in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will be supplemented with make-up water by a groundwater well. The recycled wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities. No wash water will be discharged."
190	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-008	The removal of the existing dock should be scoped in as an impact to marine habitat because of the biota which will have colonized the structure since its construction.	The scope of the proposed project includes the removal of the existing small craft dock. It will be considered as part of the marine assessment.	None proposed.
191	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-009	Spillage of aggregate and scouring or other changes due to boat and barge traffic should be anticipated. How will this be monitored if there is no baseline of the nearshore bathymetry? Such a baseline should be developed so that these events and changes can be tracked and addressed.	There are existing bathymetric and geophysics studies in the nearshore of the project site. Tug activity will be limited and within normal thruster limits while recovering and leaving barges. A detailed marine and marine underwater video and habitat mapping survey has been undertaken in the existing water lease area. The area is being used as an existing log dump area for crownland forest harvest activities. No impacts to existing habitats are anticipated related to tug and barge operations. Tug activities will be limited to once every two days.	None proposed.
192	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-010	It must be confirmed that the marine barging component of the proposed project as scoped includes the end points of the barging routes in Langley and Burnaby. (Maps and figures were not available to this reviewer to confirm same.)	The spatial boundary for marine transportation assessment includes the shipping route from the Proposed Project site through Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel in Howe Sound and through to the north arm of the Fraser River. Project-related marine barge traffic will replace marine barge traffic from existing sites. Only incremental increases in marine traffic over baseline conditions will be assessed. The use of existing facilities at Langley and Burnaby are not within the scope for the assessment. The barge shipping route will involve existing navigation shipping routes.	None proposed.
193	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-011	Is there zero spillage of fuels or other hydrocarbons with all the marine traffic expected? Presumably there will be a spill response plan to deal with this type of accident.	No spills are anticipated. An assessment of potential accidents and malfunctions, including fuel or hydrocarbon spills, will be included in the EAC Application/EIS. Sections 12.1 Construction Environmental Management Programme and 12.2 Operational Environmental Management Programme include provisions for Spill Prevention and Emergency Response Procedures and Materials Storage, Handling and Waste Management.	None proposed.
194	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-012	Presumably the functional ecosystem to be created in the pit will be an aquatic one. Which section of the Application/EIS will describe this habitat? Which section of the Application/EIS will address the impact of converting a terrestrial ecosystem into an aquatic one?	Potential effects on terrestrial habitats will be assessed in Section 5.2 Terrestrial Habitat and Vegetation.	None proposed.

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195	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-013	The Projected Project Land Use section fails to note the Squamish Nation's Land Use Plan "Xay Temixw". This is a strategic level plan which sets out the Nation's future aspirations for its territory and the lands, waters and resources of the territory. The plan includes land zones and resource management strategies that need to be addressed as they apply to this proposed industrial development on Squamish's territorial lands and waters.	Text has been updated in response to comment. Part C, First Nations Information Requirements, Section 10.0, "Background," will also include references to First Nations land use plans, where available.	Section 2.6 revised to include the following: "- Identification of the land and resource management plans that the Proposed Project overlaps, including existing plans developed by First Nations. This will also include a list of the management objectives of the Land and Resource Management Plans;"
196	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-014	Freshwater benthic communities (flora and fauna) should be added as a Valued Component (VC).	Acknowledged that the use of benthic invertebrates and periphyton often provide meaningful indices for monitoring change in aquatic environments. Marine and freshwater benthic invertebrates are being collected. Initial surveys of benthic invertebrates indicated limited homogenous environments to monitor invertebrates in freshwater in a statistically robust manner. Complete periods of dry conditions were observed in all streams and creeks in the area including McNab Creek. Ongoing forest harvesting activities in the entire watershed, peak flood events, and low flow events will have strong impacts on freshwater benthic invertebrate density and community structure. Freshwater productivity is being measured using water quality (including nutrients and chlorophyll), fish distribution and habitat use. Aquatic Health is also being assessed as a VC under Surface Water Resources. Ref. BCEAO-017 and CEAA-036.	No changes proposed in Rev 1 (14Aug2014). Table 4 of Rev 3.1 (03Dec2014) revised to include the following under Surface Water Resources: VC - Aquatic Health Supporting Rationale - Changes in TSS / TDS and chemical quality may impact: - Periphyton – food source for invertebrates and fish; - Benthic invertebrates – link to food chain between periphyton and fish; also food source for fish and birds; and - Fish – top predator in freshwater food web.
197	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-015	Northern Abalone should be considered as a Marine benthic VC. Northern Abalone is on the federal list of species-at-risk (Threatened) and is Red-listed in BC.	While Northern abalone are a SARA-listed species, there are no known occurrences within the Proposed Project area and it has not been identified as a species that may potentially occur at the site. As a result, it has not been included as a VC. Careful study and assessment of existing marine habitat conditions has been undertaken for the project. The proposed project activities will be limited spatially to the existing water lease and an active area of log dump being used by BCTS for crownland forest harvesting activities. BURNCO has supported a Squamish Nation-led study that is intended to identify Squamish Nation interests in the project area and potential adverse project effects to those interests. Final VC selection will include species and communities of importance to First Nations that are not otherwise identified, where this information is made available through consultation.	None proposed.
198	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-016	Barn Swallow should be considered as a terrestrial wildlife and vegetation VC because it is a Blue-listed species, identified as Threatened by COSEWIC, and has been identified on the Property.	Some VCs were selected because they are particularly vulnerable or represent a biological niche that is representative of other species. For example, Common nighthawk was selected as a representative insectivorous bird species. Notwithstanding, all species at-risk identified for the Proposed Project area will be discussed in the EAC Application/EIS, with a more detailed level of analysis being provided for selected VCs which may be representative of other species. Rationale for excluding species potentially occurring in the project area from the list of selected valued components will be provided.	To clarify, Section 5.2.3.1 revised to include: "Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided."
199	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-017	Great Blue Heron, other raptor species (e.g., Bald Eagle, osprey), and their nests should be included as VCs. The nests of these species are protected year-round and Great Blue Heron is a species-at-risk and is known to occur on the Property.	Some VCs were selected because they are particularly vulnerable or represent a biological niche that is representative of other species. For example, Common nighthawk was selected as a representative insectivorous bird species. Notwithstanding, all species at-risk identified for the Proposed Project area will be discussed in the EAC Application/EIS, with a more detailed level of analysis being provided for selected VCs which may be representative of other species. Rationale for excluding species potentially occurring in the project area from the list of selected valued components will be provided.	To clarify, Section 5.2.3.1 revised to include: "Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided."
200	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-018	Coastal tailed frog should be considered as a VC because it is a species-at-risk and is known to occur in Harlequin Creek.	Agreed. Coastal tailed frog is included as a VC (Amphibian Species-at-Risk).	To clarify, Table 3 revised as follows: "- Amphibian Species-at-Risk, including Coastal Tailed Frog;"
201	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-019	Moose, deer and black bear are important wildlife to First Nations and should be included in the effects assessment.	Text has been updated in response to this comment.	In Section 4.2, supporting rationale for the identification of Terrestrial Wildlife and Vegetation VCs in Table 3 will be revised to include: "- Species and communities of importance to First Nations that are not otherwise identified, where this information is made available through consultation."
202	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-020	Plants used by First Nations (traditional use, medicinal plants) should be included as a VC.	Text has been updated in response to this comment.	In Section 4.2, supporting rationale for the identification of Terrestrial Wildlife and Vegetation VCs in Table 3 will be revised to include: "- Species and communities of importance to First Nations that are not otherwise identified, where this information is made available through consultation."

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203	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-021	The effects of sub-marine noise and boat traffic on marine mammals should be specifically addressed.	Acknowledged. Text will be revised to specifically include potential effects on marine mammals, including effects of underwater noise.	Section 5.1.5 revised to include the following: "- Direct and indirect effects on marine mammals and birds associated with shipping activities, including underwater noise."
204	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-022	Stability of pit and the hydraulic berm during and post-operation are long term geotechnical stability issues, and should be addressed in this section.	Section 5.3.5 Effects Assessment includes provisions for the following studies that will be done for Geotechnical and Natural Hazards VCs: - Stability evaluations of the Proposed Project for both static and seismic cases and consider several options for development / sequencing of the site to confirm facilities are developed in a safe manner; - Evaluation of existing or potential natural hazard conditions which could impact the sequencing of excavation and development of the pit slopes, stockpile locations or heights, and the stability of the adjacent McNab Creek channel sides slopes; and - A review of the potential impact of changes in surface water and groundwater seepage into or from the Project site	None proposed.
205	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-023	Release of hydrocarbons should be specifically mentioned.	An assessment of potential accidents and malfunctions, including fuel or hydrocarbon spills, will be included in the EAC Application/EIS. Sections 12.1 Construction Environmental Management Programme and 12.2 Operational Environmental Management Programme include provisions for Spill Prevention and Emergency Response Procedures and Materials Storage, Handling and Waste Management.	None proposed.
206	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-024	First Nations Rights should be included as a Social VC.	Text has been updated in response to this comment. Given First Nations rights and interests can cross-cut environment, economic, social, heritage, and health values, a "First Nations" section will be added to Table 3. The assessment of effects to First Nations rights and interests will be presented in Part C, First Nations Information Requirements.	In Section 4.2, a "First Nations" section will be added to Table 3, comprising the following: Discipline / Theme: - First Nations Consultation / Interests Valued Component(s): - Past, present, and anticipated future uses of the Project area for traditional purposes, including the identification of specific asserted Aboriginal rights / title; and, - Other Aboriginal interests relative to potential social, economic, environmental, heritage, and / or health effects of the Project (to the extent not already identified above). Definition and/or Supporting Rationale: To identify potential effects of the Proposed Project to Aboriginal rights and interests, and proposed mitigation to avoid or minimize adverse effects and/or to enhance benefits.
207	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-025	Traditional Land Use (e.g., First Nations access, hunting, fishing and gathering) should be included as a Social VC.	Text has been updated in response to this comment. Given First Nations rights and interests can cross-cut environment, economic, social, heritage, and health values, a "First Nations" section will be added to Table 3. The assessment of effects to First Nations rights and interests will be presented in Part C, First Nations Information Requirements.	In Section 4.2, a "First Nations" section will be added to Table 3, comprising the following: Discipline / Theme: - First Nations Consultation / Interests Valued Component(s): - Past, present, and anticipated future uses of the Project area for traditional purposes, including the identification of specific asserted Aboriginal rights / title; and, - Other Aboriginal interests relative to potential social, economic, environmental, heritage, and / or health effects of the Project (to the extent not already identified above). Definition and/or Supporting Rationale: To identify potential effects of the Proposed Project to Aboriginal rights and interests, and proposed mitigation to avoid or minimize adverse effects and/or to enhance benefits.
208	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-026	The effect of noise on wildlife (terrestrial and marine) should be included in the noise assessment on humans. The effect of noise on Roosevelt Elk is an important issue for First Nations and needs to be considered in the effects assessment.	The Terrestrial Wildlife and Vegetation Assessment (Section 5.2.5 Effect Assessment) includes sensory disturbance for wildlife (i.e., "potential for effects from alterations to noise and light regimes").	None proposed.

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209	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-027	Pre-application and Application/EIS review phase consultation information is to be developed jointly with the Squamish Nation, including consultation logs, activities constituting consultation, summaries of key issues, and any information on potential aboriginal rights that may be engaged by the proposed project. Failing that, the information on consultation to be presented must distinguish between that information Squamish agrees constitutes consultation with the proponent and information that Squamish does not agree constitutes consultation.	Section 3.3 will present a summary of consultation activities between BURNCO and First Nations in relation to the Proposed Project for the Pre-Application period, as well as outline proposed activities for EAC Application/EIS Review period. This section, and any documentation proposed to be submitted in support of the section, will be, to the extent possible, developed jointly with First Nations, and/or provided to First Nations in draft for review and comment in advance of submission of the final EAC Application/EIS to the EAO and CEA Agency.	None proposed.
210	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-028	Spatial boundaries for cumulative effects need to be defined too.	Agreed. Section 4.7.4 includes provisions to establish spatial and temporal boundaries for potential cumulative effects interactions and overlap with the Proposed Project.	None proposed.
211	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-029	The study area boundaries for wildlife, fisheries and marine LSAs are too small and must be expanded. For wildlife, large mammals such as bear, deer, elk all have much larger ranges than indicated. For fisheries, the anadromous species will be using the nearshore habitat at certain times, as well as freshwater, and have the potential to be affected during this life stage. For marine species, the increased boat traffic, possible aggregate spillage, possible fuel spills, other accidents and malfunctions etc. all have the potential to affect a much larger area – this must be accounted for in the Application/EIS.	The LSA is established to assess species with small home ranges while the RSA allows for the assessment of species with larger home ranges. The LSA is delineated by a 500 metre (m) buffer surrounding the Application Site and encompasses habitat within the McNab Valley similar to the Application Site, encompassing 633 ha. An LSA of this size encompasses the home range of species with smaller home ranges such as amphibians. The RSA is large enough to encompass seasonal home ranges of large fauna, such as grizzly bear (30,034 hectares) and is therefore considered appropriate to encompass home ranges of other large mammals such as deer and elk. The marine RSA includes the shipping route from the Proposed Project site through Ramillies, Thornbrough and Queen Charlotte channels in Howe Sound to the mouth of the north arm of the Fraser River. Text will be revised to specifically include potential effects on marine mammals, including effects of underwater noise.	Section 5.1.5 revised to include the following: "- <u>Direct and indirect effects on marine mammals and birds associated with shipping activities, including underwater noise.</u> "
212	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-030	The clear cut logging by Canfor and others must be addressed in proper cumulative effects assessment (particularly for the effects on wildlife habitat).	Acknowledged. Logging activities to be included as an activity to be considered as part of the cumulative effects assessment.	Table 4 revised to include: "- <u>large scale logging near to and within the Proposed Project area.</u> "
213	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-031	The distance for future forestry operations (2 to 10 km) is too small an area, considering the elimination of habitat for large mammals.	Acknowledged. Table 4 represents a preliminary list of past, present and future projects and activities to be considered as part of the cumulative effects assessment. The distance of 2 to 10 km represents the distance of anticipated future logging activities from the Proposed Project site. A more detailed analysis of projects will be considered in the cumulative effects assessment.	None proposed.
214	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-032	Squamish Nation rights and interests are integrally connected to environmental values and cannot be effectively addressed without Squamish involvement in determining assessment methodology, VCs, the spatial and temporal boundaries of the VCs, the relevant background information necessary to assessing impacts to VCs, the assessment of effects to VCs, mitigation, and residual and cumulative effects. Squamish's involvement in determining these in this EA must be addressed fulsomely in the Application/EIS.	Acknowledged. First Nations involvement in the EA will be described in Section 3.3. See response to comment SN-027.	None proposed.
215	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-033	The marine LSA for direct project effects is too small.	The marine LSA includes has been defined to include intertidal and subtidal areas potentially effected by on-site components of the Proposed Project, including the proposed marine terminal facilities in Thornbrough Channel (barge loader, conveyor and mooring buoy). Additional survey work has been undertaken at a marine sampling reference site to ensure a meaningful comparison is undertaken for the effects assessment. The marine RSA includes the shipping route from the Proposed Project site through Ramillies, Thornbrough and Queen Charlotte channels in Howe Sound to the mouth of the north arm of the Fraser River.	None proposed.
216	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-034	Marine and freshwater sampling design should include establishing sites for BACI comparison during operational monitoring	Marine sampling reference site is adjacent to the Potlach Creek watershed. Freshwater sampling reference sites are upstream of the Proposed Project on McNab Creek and also within neighbouring Harlequin Creek. All references will be unaffected by the Proposed Project.	None proposed.
217	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-035	Ephemeral streams and vernal pools should also be considered in the assessment of vegetation resources. These can provide important habitat for wildlife (e.g., amphibians).	Ephemeral streams and vernal pools, and associated wildlife species, are included in the terrestrial wildlife and vegetation assessment.	None proposed.
218	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-036	Rationale for excluding species (e.g., species at risk or species of management concern) potentially occurring in the project area should also be provided.	Rationale for excluding species potentially occurring in the project area from the list of selected valued components will be provided.	To clarify, Section 5.2.3.1 revised to include: "- <u>Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided.</u> "

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219	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-037	A species specific RSA should be identified to assess project impacts on Roosevelt Elk. This species is of high importance both to the province and the Squamish Nation. The RSA for Roosevelt Elk should encompass the entire range of the relocated herd.	Roosevelt elk are recognized as a VC and will be discussed in detail in the effects assessment. Considerable effort has been put into the terrestrial RSA boundary, which encompasses sufficient area on which to base an assessment of effects to elk. There have been ongoing discussions with FLNRO regarding the range and habitat preferences of the Roosevelt elk population. The RSA as defined encompasses sufficient land base for assessment of cumulative effects on population and habitat of the elk herd.	None proposed.
220	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-038	Background information for wildlife VCs should include a brief description of life history, highlighting any sensitive stages.	Life history of wildlife VCs, including sensitive stages, will be included baseline study. Section 5.2.5 Effects Assessment contemplates the identification and evaluation of potential adverse effects on key life stage requirements of wildlife.	To clarify, Section 5.2.4 revised as follows: "The terrestrial wildlife and vegetation resource baseline study will provide detailed information in the VCs, <u>including sensitive life-cycle stages</u> , and all sources of information will be listed."
221	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-039	Needs to include legislation as indicated. Currently only inventory methods are outlined in this section. Include inventory methods for ungulates.	Legislation related to Terrestrial Wildlife and Vegetation will be discussed in Section 5.2.2. Inventory methods for ungulates will be included.	Section 5.2.3.3 Assessment Methods revised to include: "- <u>Ground-based Inventory Methods for Selected Ungulates: Moose, Elk and Deer, Version 2.0 (RIC 1998);</u> "
222	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-040	Squamish Nation information, interests, and potential effects and benefits must be disaggregated in the Economic and Social Effects sections of the Application/EIS because of the inequitable distribution of these effects as between First Nations and non-First Nations communities. To fail to separate these out will mean that the analysis in these sections will be meaningless with respect to the Squamish Nation's interests.	First Nations economic and social information and interests relative to potential project effects and benefits will be assessed separately in Part C, First Nations Information Requirements.	None proposed.
223	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-041	Squamish Nation information, interests, and potential effects and benefits must be disaggregated in the Economic and Social Effects sections of the Application/EIS because of the inequitable distribution of these effects as between First Nations and non-First Nations communities. To fail to separate these out will mean that the analysis in these sections will be meaningless with respect to the Squamish Nation's interests.	First Nations economic and social information and interests relative to potential project effects and benefits will be assessed separately in Part C, First Nations Information Requirements.	None proposed.
224	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-042	Squamish Nation experience with EAs previously has been that CEMPs and OEMPs are insufficiently developed prior to the conclusion of the EA processes associated with proposed projects and, as such, cannot be relied on as mitigation to address impacts to Squamish Nation interests. Direction should be given to ensure CEMPs and OEMPs are fully developed, and their terms included as certificate commitments and assurances (should a certificate issue), before the EA for this proposed project is concluded.	Acknowledged.	None proposed.
225	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-043	Specific management plans for bears should be included in the construction/operational Environmental Management Programs.	Bear management planning will be specifically addressed in Fish, Vegetation and Wildlife Protection to be included in Construction and Operational Environmental Management Programs.	To clarify, Sections 12.1 Construction Environmental Management Programme and 12.2 Operational Environmental Management Programme will be revised as follows: "- Fish, Vegetation and Wildlife Protection, <u>including Bear Management.</u> "
226	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-044	Squamish Nation experience has been that environmental monitoring and follow-up is very poorly done, often with no formal implementation of monitoring and follow-up on projects to ensure certificate commitments and assurances are met. Squamish will be seeking robust, clear, implementable, funded monitoring and follow-up programs set out as part of the certificate (should one issue) commitments and assurances for the project. Short of this goal being met as part of the EA, Squamish will be seeking to implement a monitoring and follow-up program that will be conducted by the Squamish and fully funded by the proponent for the life of the project and beyond as necessary to monitor residual effects.	Acknowledged.	None proposed.
227	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-045	The summaries of potential residual effects of the proposed project on Squamish rights and interests, after the application of mitigation measures and compensation strategies, are to be developed jointly with the Squamish Nation. Failing that, the information is to be presented in such a way that the reader can ascertain which information Squamish agrees with and which it does not.	BURNCO commits to providing opportunities to work jointly with applicable First Nations to identify potential residual project effects to First Nations rights or interests.	None proposed.
228	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-046	There is no mention of Traditional Use Studies being completed.	While traditional use studies per se are not a requirement of the BCEAA / CEAA process for project review, BURNCO has committed to funding a Squamish Nation-led study that is intended to identify Squamish Nation interests in the project area and potential adverse project effects to those interests. BURNCO has also committed to co-developing, with the Squamish Nation, mitigation measures to offset potential adverse effects to identified interests. These elements together are meant to largely address Part C, First Nations Information Requirements.	None proposed.
229	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-047	The information in this section is to be developed jointly with the Squamish. Failing that, the information is to be presented in such a way that the reader can ascertain which information Squamish agrees with and which it does not.	While traditional use studies per se are not a requirement of the BCEAA / CEAA process for project review, BURNCO has committed to funding a Squamish Nation-led study that is intended to identify Squamish Nation interests in the project area and potential adverse project effects to those interests. BURNCO has also committed to co-developing, with the Squamish Nation, mitigation measures to offset potential adverse effects to identified interests. These elements together are meant to largely address Part C, First Nations Information Requirements.	None proposed.

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230	Giroday, Lesley	Ratcliffe and Company on behalf of Squamish Nation	10-May-13	dAIR 1.0 (22Feb2013)	SN-048	It is Squamish Nation's view, based on its extensive experience with EAs in its territory over many years that a proper cumulative effects assessment (CEA) will not be undertaken in this EA under the respective provincial and federal legislation. The Crown developer and Squamish Nation should develop a CEA jointly as an adjunct to this EA to ensure these effects are appropriately assessed and the recommendations of a CEA are implemented. Further, Squamish does not support the disaggregation of a CEA for this proposed project as currently set out in the draft EISG/AIR; CEA deserves a stand-alone section. Squamish will be addressing this priority matter directly with the Crown; the Crown has a legal obligation to ensure our interests are not subject to "death by 1,000 cuts".	The proposed CEA approach and method are consistent with provincial and federal guidance. BURNCO commits to providing opportunities to work jointly with applicable First Nations to identify potential residual project effects, including cumulative project effects, to First Nations rights or interests. A summary of predicted residual effects, including both direct and cumulative effects, will be presented in Part F Conclusions and Commitments.	None proposed.
231	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-001	Describe baseline studies that summarize known heritage sites within the project footprint and its vicinity.	Section 8.1.4 describes the assessment of baseline conditions as follows: The baseline assessment will be conducted in accordance with the requirements of the Heritage Conservation Act (HCA). The baseline assessment will provide a review of background information, environmental setting and characteristics for each heritage resource VC. Moreover, the baseline will be characterised using the following methods and approaches: - Literature and map reviews; - Review of readily available archival documentation; - Heritage Resource Overview Assessment (HROA); - Heritage Resource Impact Assessment (HRIA); - Comparison of heritage information in LSA to RSA; and - Completion of Heritage Conservation Act (HCA) Section 14 Inspection Permit obligations.	None proposed.
232	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-002	Describe steps taken to ensure that the extent of known heritage sites within the project footprint is verified.	Section 8.1.4 describes the assessment of baseline conditions as follows: The baseline assessment will be conducted in accordance with the requirements of the Heritage Conservation Act (HCA). The baseline assessment will provide a review of background information, environmental setting and characteristics for each heritage resource VC. Moreover, the baseline will be characterised using the following methods and approaches: - Literature and map reviews; - Review of readily available archival documentation; - Heritage Resource Overview Assessment (HROA); - Heritage Resource Impact Assessment (HRIA); - Comparison of heritage information in LSA to RSA; and - Completion of Heritage Conservation Act (HCA) Section 14 Inspection Permit obligations.	None proposed.
233	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-003	Describe steps taken to identify unknown heritage sites within the project footprint.	Section 8.1.4 describes the assessment of baseline conditions as follows: The baseline assessment will be conducted in accordance with the requirements of the Heritage Conservation Act (HCA). The baseline assessment will provide a review of background information, environmental setting and characteristics for each heritage resource VC. Moreover, the baseline will be characterised using the following methods and approaches: - Literature and map reviews; - Review of readily available archival documentation; - Heritage Resource Overview Assessment (HROA); - Heritage Resource Impact Assessment (HRIA); - Comparison of heritage information in LSA to RSA; and - Completion of Heritage Conservation Act (HCA) Section 14 Inspection Permit obligations.	None proposed.
234	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-004	Describe the scales of significance applied to these sites.	Significance is defined as per the BC Archaeological Impact Assessment Guidelines, which include criteria for scientific, public, ethnic, historic, and economic criteria to be considered when evaluating archaeological resources.	None proposed.
235	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-005	Describe the potential impact of this project to known heritage sites within the project footprint.	Section 8.1.6 of the EAC Application/EIS will identify and evaluate potential adverse effects of all phases of the Proposed Project on heritage resource VCs.	None proposed.
236	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-006	Describe the proposed mitigation strategies for such heritage sites.	Section 8.1.6 of the EAC Application/EIS will identify measures to mitigate potential effects on heritage resources, including a discussion of their effectiveness and limitations.	None proposed.

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237	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-007	Specify the source of the proposed wash water.	The wash plant will be fed using recycled water from two large storage tanks supplemented with make-up water by a groundwater well.	Section 2.2.3.2 revised as follows: "Wash water will be processed for removal of fines and silt in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will be supplemented with make-up water by a groundwater well. The recycled wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities. No wash water will be discharged. "
238	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-008	Provide an evaluation of how use of wash water will affect surface water.	Potential effects of wash water will be addressed in the assessment of Surface Water Resources.	None proposed.
239	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-009	Provide an evaluation of how use of wash water will affect groundwater.	Potential effects of wash water will be addressed in the assessment of Groundwater Resources.	None proposed.
240	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-010	The proposal includes 28 hectares of open water in the gravel pit for some period of time. The impact on surface water from pond evaporation should be evaluated as part of the review. Case studies from Washington State suggest that pond evaporation can have a much larger impact on water resources than the use of wash water.	The effects of pond evaporation will be considered in assessing potential effects on surface water. Referenced case studies will be reviewed and considered.	None proposed.
241	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-011	The proposal includes 28 hectares of open water in the gravel pit for some period of time. The impact on groundwater from pond evaporation should be evaluated as part of the review. Case studies from Washington State suggest that pond evaporation can have a much larger impact on water resources than the use of wash water.	The effects of pond evaporation will be considered in assessing potential effects on groundwater. Referenced case studies will be reviewed and considered.	None proposed.
242	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-012	Describe in detail proposed wastewater treatment and disposal.	Wash water will be processed for removal of fines and silt in a 95% efficient wash plant to be fed using recycled water from two large storage tanks. The 5% loss (via retention, evaporation and absorption) will be supplemented with make-up water by a groundwater well. The recycled wash water will be processed, screened and pressed to remove the sediment. Fines and silt will be mechanically dried. The resulting cakes of sediment will be mixed with organic overburden material and used for the construction of the north berm, as well as for progressive revegetation and reclamation activities. No wash water will be discharged. Household waste, and industrial solid waste, and liquid waste pumped from portable washroom facilities will be barged off-site and disposed of in approved facilities. The EAC Application/EIS will include a description of proposed wastewater treatment and disposal processes and facilities.	The following has been added to Section 2.2.4: "The EAC Application/EIS will include a description of proposed wastewater treatment and disposal processes and facilities."
243	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-013	Describe in detail ... provisions for stormwater management and the quality and quantity of runoff from the site.	The EAC Application/EIS will include an Environmental Management Programme that included Sediment, Erosion and Drainage Control and Water Management Plans for construction and operational phases of the Project.	None proposed.
244	Hanson, Erin	Tsleil-Waututh Nation	31-May-13	dAIR 1.0 (22Feb2013)	TWN-014	The review will cover environmentally sensitive areas. The definition of "environmentally sensitive area" should be expanded to include any areas so identified by affected First Nations, and each should be given an opportunity to provide input.	The areas identified in the dAIR are examples of what the CEA Agency defines as "environmentally sensitive." These areas are equivalent to identified Valued Components, including areas identified as important to First Nations through consultation during the EA. See responses to comments SN-024 and SN-025.	None proposed.
245	Hatziantoniou, Yota	Health Canada	20-Jun-13	dAIR 1.0 (22Feb2013)	HC-001	Include potential contamination of country foods as part of the human health assessment.	The EAC Application/EIS will include an assessment of potential effects on country foods.	Section 4.2 (Table 3) revised to include 'Country foods' as a VC, and as follows: "- Public health issues including changes to water quality, and air quality, and country foods (including food trapped, fished, hunted, harvested or grown for subsistence or medicinal purposes, or obtained from recreational activities such as sport fishing and/or game hunting) will be integrated incorporated from across all relevant disciplines. in a single report as a whole to address accumulation of many potential issues holistically rather than individually within discipline specific reports."
246	Hatziantoniou, Yota	Health Canada	20-Jun-13	dAIR 1.0 (22Feb2013)	HC-002	Include potential contamination of country foods as part of the human health assessment.	The EAC Application/EIS will include an assessment of potential effects on country foods.	Section 9.0 revised to include an assessment of potential effects on country foods.
247	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Jun-13	dAIR 1.0 (22Feb2013)	CEAA-004	Omnibus comments to clarify references to former CEAA and related requirements.	All comments incorporated or otherwise addressed.	Omnibus changes tracked in dAIR Rev 1.1.
248	Hamblin, Gerry	British Columbia Environmental Assessment Office	27-Jun-13	dAIR 1.0 (22Feb2013)	BCEAO-015	Provided new AIR guidance document	Revisions made to Table of Contents to more closely align with new AIR guidance document.	Structural changes tracked in dAIR Rev 1.1.

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249	Hanson, Erin	Tsleil-Waututh Nation	2-Aug-13	dAIR 1.0 (22Feb2013)	TWN-015	Thank you for sending these [draft responses to 31-May-2013 comments] along. We don't have any specific comments at this stage but I will get in touch should that change. We look forward to staying updated on the Project.	Acknowledged.	None proposed.
250	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-001.1	It is important that Squamish Nation's occupation and use of this area be appropriately acknowledged in the relevant sections of the Application/EIS. Squamish will review sections 7.3 and Part C to assess accuracy and completeness.	It is BURNCO's expectation that First Nations will provide the information needed to support Part C. BURNCO will provide a draft of this and other relevant sections of the EAC Application/EIS to First Nations for review and comment in advance of submission of the final EAC Application/EIS to the EAO and CEA Agency.	None proposed.
251	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-002.1	Squamish's initial comment has not been addressed. The issue as to whether the surface flow of McNab Creek will be captured by the pit must be addressed as part of the assessment of impact, not just through follow up monitoring. This is an unresolved concern.	Ref. SN-002 Potential effects on groundwater and surface water quantity and quality (including storm events) will be assessed using predictive models calibrated with empirical data. EAC Application/EIS will include a description of how model predictions were used to assess potential effects and how monitoring data was used to inform predictive modelling.	Section 4.1 General revised to include: "- A description of how model predictions were used to assess potential effects and how monitoring data was used to inform predictive modelling;"
252	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-005.1	Please provide a copy of the Elanco 2010 reference.	BURNCO was provided the document by DFO. BURNCO will request that DFO provide a copy to the Squamish Nation.	None proposed.
253	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-007.1	Is the groundwater well mentioned for make-up water part of the project description?	The groundwater well for make-up water is included in the description of the Processing Plant and identified on Figure 3 of dAIR/EIS Guidelines Rev 1.1.	To clarify, Section 2.2.3.1 has been revised to include: - groundwater well as a source of make-up water for the processing plant;
254	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-009.1	Please provide a figure reference for the size of the water lease area.	Existing water lease (log tenure) area is shown in Figures 2 and 3 of dAIR/EIS Guidelines Rev 1.1.	Figures 2 and 3 revised to include existing log tenure area.
255	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-014.1	We do not agree that "peak flood events and low flow events" can be used as a rationale for not considering freshwater productivity as a VC. If there is no functional value at the primary production level in McNab due to very harsh natural conditions then the proponent should be able to demonstrate this. Squamish's initial comment has not been addressed. Freshwater benthic communities need to be addressed as a VC or VCs.	Ref SN-014 Water quality (including nutrients and chlorophyll) and fish distribution and habitat use are the critical indicators of potential effects of the Project and have therefore been selected as the focus of the assessment. There are no proposed discharges to / withdrawals from McNab Creek. Potential adverse impacts to McNab Creek and not anticipated. Notwithstanding, marine and freshwater benthic samples have been/are being collected. Aquatic Health is also being assessed as a VC under Surface Water Resources. Ref. BCEAO-017 and CEAA-036.	No changes proposed in Rev 1 (14Aug2014). Table 4 of Rev 3.1 (03Dec2014) revised to include the following under Surface Water Resources: VC - <u>Aquatic Health</u> Supporting Rationale - <u>Changes in TSS / TDS and chemical quality may impact:</u> - <u>Benthic invertebrates – food source for invertebrates and fish;</u> - <u>Periphyton – link to food chain between periphyton and fish; also food source for fish and birds; and</u> - <u>Fish – top predator in freshwater food web.</u>
256	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-015.1	The proponent states that there are no known occurrences of Northern abalone and that they have not been identified as a species that may potentially occur at the site. Since Northern abalone live in a wide variety of habitats this statement must be supported by a description of the methods used to determine this conclusion (i.e., Was this habitat based? Were surveys completed?).	Ref SN-015 The conclusion that there are no known occurrences of Northern abalone within the Proposed Project area is based on a desktop review (SARA Registry, BC Conservation Data Centre) and a review of habitat suitability. These results were calibrated based on dive and underwater camera video survey observations.	None proposed.
257	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-017.1	Squamish's initial comment has not been addressed. Raptors and their nests (including Great Blue Heron, Bald Eagle, Osprey) should be included since destroying the nests of these species has legal implications. If they are included as a VC this will lead to necessary mitigation (i.e., pre-clearing nest surveys).	Ref SN-017 Raptors and their nests will be considered in the assessment. The presence/absence of known observations was calibrated by field surveys throughout the Proposed Project site during which one eagle's nest was observed. Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided. Limited clearing will be required. Construction Environmental Management Planning will include provisions for pre-clearing nest surveys.	None proposed.
258	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-019.1	Squamish's initial comment has not been addressed. Moose, deer, elk and black bear are important wildlife to First Nations and should be included in the effects assessment. Squamish is identifying them now as species of importance, no further process should be required. The initial comment has not been addressed and remains an unresolved, outstanding issue (Ref SN-019).	Ref SN-019 The importance of moose, deer, elk and black bear to First Nations is acknowledged. Roosevelt Elk have been included as a VC and are considered to represent other ungulate species. Moose range in British Columbia does not include the South Coast environment (Blood 2000). Deer and black bear will be considered in the assessment and have been reviewed as part of the wildlife surveys and study. Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided.	None proposed.
259	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-020.1	Squamish will provide a list of traditional use and medicinal plants for inclusion as a VC.	Acknowledged.	None proposed.
260	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-024.1	Revise proposed language changes to: Discipline/Theme: First Nations Interests (delete "consultation").	Ref SN-024 Text has been updated in response to this comment.	Table 3 has been revised as follows: Discipline / Theme: - First Nations Consultation / Aboriginal Interests
261	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-025.1	Revise proposed language changes to: Discipline/Theme: First Nations Interests (delete "consultation").	Ref SN-025 Text has been updated in response to this comment.	Table 3 has been revised as follows: Discipline / Theme: - First Nations Consultation / Aboriginal Interests

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262	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-027.1	Squamish's view is that any summary of consultation should be developed jointly and, to the extent that this is not possible, the summary must reflect Squamish's views as to what it agrees constitutes consultation and what it does not agree constitutes consultation.	Acknowledged. The summary of consultation activities will be, to the extent possible, developed jointly with First Nations. First Nations will be provided the applicable summary in draft for review and comment in advance of submission of the final EAC Application/EIS to the EAO and CEA Agency. It is BURNCO's intention that any disagreements regarding the characterization of what is and what is not consultation will be resolved prior to finalization. Outstanding issues will be clearly identified.	None proposed.
263	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-029.1	If the assessments methods used were the same for both the wildlife LSA and RSA this would be ok, however the dAIR indicates that TEM based wildlife suitability mapping is only being completed within the LSA meaning wide ranging species will miss this more detailed level of assessment. What kind of data will be collected in the RSA for large wildlife?	Habitat suitability modeling, calibrated by field surveys (for certain species), observations and wildlife camera-based studies, were as completed for selected VCS at the RSA level.	None proposed.
264	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-032.1	The response to SN-027 does not assist in addressing this comment. The initial comment has not been addressed and remains a critical, outstanding issue (Ref SN-032).	Ref SN-027 and SN-032 First Nations involvement in determining the parameters for the EA, such as providing input into the development of the AIR/EIS Guidelines through commentary on drafts, will be summarized in Section 3.3 of EAC Application/EIS. First Nations will be provided the Section 3.3 summary in draft for review and comment in advance of submission of the final EAC Application/EIS to the EAO and CEA Agency. It is BURNCO's intention that any disagreements regarding the content in the summary will be resolved prior to finalization. Outstanding issues will be clearly identified.	None proposed.
265	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-040.1	The approach suggested will only be effective if Part C addresses economic and social information for First Nations in as fulsome a fashion as they are addressed in the "non-aboriginal" sections of the EIS/Application. Typically, this is not the case. This concern remains unresolved (Ref SN-040).	Ref SN-040 It is BURNCO's expectation that First Nations will provide the information needed to support Part C, and that First Nations will work with BURNCO to assess and mitigate potential effects of the Proposed Project on First Nations interests, as well as to identify potential benefits. BURNCO will provide a draft of Part C and other relevant sections of the EAC Application/EIS to First Nations for review and comment in advance of submission of the final EAC Application/EIS to the EAO and CEA Agency.	None proposed.
266	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-042.1	Ref SN-042 The initial comment has not been addressed and remains a critical outstanding concern.	Ref SN-042 Mitigation to address potential affects of the Proposed Project to First Nations rights and interests, including through CEMPs and OEMPs, will be, to the extent possible, developed jointly with First Nations. It is BURNCO's intention to work with First Nations to sufficiently advance these plans so that they can be relied upon, where appropriate, as mitigation to offset potential effects to First Nations rights and interests.	None proposed.
267	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-044.1	Ref SN-044 The initial comment has not been addressed and remains a critical outstanding concern.	Ref SN-044 BURNCO plans to implement a robust monitoring program and to meet all related commitments and assurances that would form conditions of an EA Certificate, if issued. BURNCO commits to discussing the development and implementation of this program with Squamish Nation.	None proposed.
268	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-045.1	Squamish's view is that summaries of potential residual effects of the proposed project on Squamish rights and interests should be developed jointly with the Squamish and, to the extent this is not possible, the summaries of effects must reflect Squamish's views as to what it agrees with and what it does not agree with.	Summaries of potential residual effects of the Proposed Project on First Nations rights and interests will be, to the extent possible, developed jointly with First Nations, and will be presented in Part C. First Nations will be provided the applicable summaries in draft for review and comment in advance of submission of the final EAC Application/EIS to the EAO and CEA Agency. It is BURNCO's intention that any disagreements regarding the summaries of potential residual effects will be resolved prior to finalization. Outstanding issues will be clearly identified.	None proposed.
269	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-046.1	It is important to note that a study to identify Squamish's interests as they have the potential to be engaged by the proposed project will need to be broader than a typical TUS. Squamish utilizes an "Aboriginal Interest and Use Study" approach which incorporates TUS, among other information.	It is BURNCO's understanding that the Squamish Nation-led study will identify all Squamish Nation interests that have the potential to be engaged by the Proposed Project, and that it will clearly identify how the Proposed Project will affect these interests. It is BURNCO's expectation that this study will substantially inform the information requirements for Part C.	None proposed.
270	Wilcox, Lisa	Squamish Nation	12-Aug-13	dAIR 1.0 (22Feb2013)	SN-048.1	Ref SN-048 The initial comment has not been addressed and remains a critical outstanding concern.	Ref SN-048 The concern expressed in the initial comment is acknowledged. BURNCO understands that Squamish Nation wishes to address this concern directly with the Crown.	None proposed.
271	Watson, Cynthia	Vancouver Coastal Health	28-Aug-13	dAIR 1.1 (14Aug2013)	VCH-010	Ref VCH-002. Page 94 (Water Quality section) of draft rev 1.1 does not include the BC Drinking Water Protection Act and Regulation.	Acknowledged. Section 9.1.3.3. will be revised to include the BC Drinking Water Protection Act and Regulation.	Section 9.1.3.3. (sub-heading Water Quality) revised as follows: - <u>British Columbia Drinking Water Protection Act and Drinking Water Protection Regulation</u> ; and
272	Hamblin, Gerry	British Columbia Environmental Assessment Office	28-Aug-13	dAIR 1.1 (14Aug2013)	BCEAO-016	By phone: remove specific on-site and off-site components listed in Section 2.3 Provincial Scope of Proposed Project.	Revised, as requested.	Revised Section 2.3, as requested.
273	Inouye, Kevin	Canadian Environmental Assessment Agency	30-Aug-13	dAIR 1.1 (14Aug2013)	CEAA-005	Tracked revisions in Rev 1.1 to clarify scope, DFO role in constructing groundwater channel as compensatory habitat, and changes to Part C.	All comments incorporated or otherwise addressed.	Omnibus changes tracked in dAIR Rev 2.0

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274	Inouye, Kevin	Canadian Environmental Assessment Agency	30-Aug-13	dAIR 1.1 (14Aug2013)	CEAA-007	Please specify how water would be used.	Water use will be specified.	Section 2.2 (bullet 8) revised as follows: - Project-related water requirements and associated water uses;
275	Inouye, Kevin	Canadian Environmental Assessment Agency	30-Aug-13	dAIR 1.1 (14Aug2013)	CEAA-008	The Agency received a number of comments identifying concerns with impacts to dolphins for the BURNCO project. The comments mentioned either Pacific white-sided dolphins or dolphins. Given the public interest, please include dolphins under the marine mammals VEC, or provide Agency a rationale for excluding dolphins.	Table 4 will be revised to include Pacific white-sided dolphins.	Table 4 revised to indicate that "Pacific white-sided dolphins have been identified as a species of public concern"
276	Inouye, Kevin	Canadian Environmental Assessment Agency	30-Aug-13	dAIR 1.1 (14Aug2013)	CEAA-009	Table 4 lists Water Quality as a VC under the Surface Water Resources discipline. The effects do not address water quality. Please discuss water quality as appropriate here.	A water balance model is being developed to predict expected flows to and from the pit lake during the operations period. The water balance will account for surface flows and groundwater flows (estimated as part of the hydrogeological assessment) to determine the pit volumes throughout operations. The water balance will also provide an estimate of the discharge from the pit lake to downstream receptors. For each flow accounted for in the water balance, a water quality will be assigned based on geochemical testing of aggregate materials and baseline results observed at surface and groundwater monitoring locations. Mass will be conserved in the model to estimate the quality in the pit lake and in the discharge from the pit lake. The influence of pit water on downstream tributaries (i.e. McNab Creek) will also be evaluated by mixing simulated pit lake water qualities with assigned surface water qualities in downstream tributaries.	Revise Section 5.4.5 to include: - <u>Model water quality based on geochemical testing of aggregate materials and baseline results observed at surface and groundwater monitoring locations. Mass will be conserved in the model to estimate the quality in the pit lake and in the discharge from the pit lake. The influence of pit water on downstream tributaries (i.e. McNab Creek) will also be evaluated by mixing simulated pit lake water qualities with assigned surface water qualities in downstream tributaries.</u>
277	Inouye, Kevin	Canadian Environmental Assessment Agency	30-Aug-13	dAIR 1.1 (14Aug2013)	CEAA-010	If you are referring to A Reference Guide for the Canadian Environmental Assessment Act: Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects (Prepared by the Federal Environmental Assessment Review Office, November 1994), please specify this.	FEARO 1994 is cited in Section 21 References. Section 15 will be revised to include the full title within the text.	Section 15 revised as follows: Significance Assessment / Analysis – The EAC Application/EIS will provide a description of the significance of the residual environmental effects identified in Sections 5.0 - 9.0. The assessment of significance will be conducted in accordance with the methods described in Section 4.0 of the EAC Application/EIS. The significance assessment will follow <u>A Reference Guide for the Canadian Environmental Assessment Act: Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects (Prepared by the Federal Environmental Assessment Review Office, November 1994 federal guidelines (FEARO 1994))</u> .
278	Inouye, Kevin	Canadian Environmental Assessment Agency	9-Sep-13	dAIR 2.0 (04Sept2013)	CEAA-006	minor editorial comments.	Revised as requested in advance of issuing Rev 2.1 for public review.	Minor editorial revisions in advance of issuing Rev 2.1 for public review.
279	Rafael, David	Sunshine Coast Regional District	27-Sep-13	dAIR 2.1 (09Sept2013)	SCRD-007	The SCR D Board on September 26 resolved to that the AIR should include "additional environmental studies be conducted on the impact of eel grass and forage fish with respect to mitigation and recovery be requested."	An assessment of potential effects on fisheries, freshwater habitat and marine resources, including marine fish species, will be provided in the EAC Application/EIS included detailed methods and study areas. Forage fish (herring) and their habitat will be specifically included as a VC.	Table 4 revised to include Forage Fish (herring) and their habitat as a VC.
280	L'Heureux, Suzanne	Transport Canada	3-Oct-13	dAIR 2.1 (09Sept2013)	TC-027	Comments nos. TC-011 through TC-024 seem to have been truncated. As they look now, they could be associated to any section/part of the draft Air/EISG. Comments should be linked to the appropriate parts and/or sections as worded in our attached email. They should also include the complete wordings for subsequent ease of reference and cross-checking. Otherwise, there are no outstanding comments.	All the required reference information is available within the issues tracking table. Next version will be provided with all the required fields.	None proposed.
281	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	7-Oct-13	dAIR 2.1 (09Sept2013)	FLNRO-018	Water Allocation is concerned about the ecosystem and fish habitat of the manmade ground water channel. Therefore, the proponent should conduct sufficient study to mitigate any adverse effect on the fish habitat of the stream.	An assessment of potential effects on fisheries, freshwater habitat and marine resources will be provided in the EAC Application/EIS.	None proposed.
282	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	7-Oct-13	dAIR 2.1 (09Sept2013)	FLNRO-012.1	Under RefdAIR1-TWG-FLNRO-012, the proponent has mentioned that a preliminary Reclamation and Closure Plan will be prepared as part of the EAC Application/EIS, and will describe the proposed measures and commitments to remove surface facilities and reclaim areas and develop a functional ecosystem in the freshwater pit. Please also note that, the proponent is required to have a Water Licence prior to the mining operation to ensure a functional ecosystem in the proposed artificial lake/freshwater pit.	Acknowledged. Requirement for a Water Licence is included in Table 3.	None proposed.
283	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	8-Oct-13	dAIR 2.1 (09Sept2013)	FLNRO-019	Under Section 2.8, page 23 of the draft Application Information Requirements - Part 1 of 2, Ministry of Environment is stated as the responsible agency for the Water Act, which should be MFLNRO	Acknowledged. Table 3 revised to accurately identify FLNRO as the agency responsible for the Water Act.	Table 3 revised to accurately identify FLNRO as the agency responsible for the Water Act.

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284	Inouye, Kevin	Canadian Environmental Assessment Agency	9-Oct-13	dAIR 2.1 (09Sept2013)	CEAA-011	The Agency will be considering comments submitted to the province during the public comment period on the dAIR that relate to the federal EA and the dEISg. To facilitate our review of the public comments and BURNCO's responses, I request that you identify any comments submitted to the BC EAO during the 30-day public comment period that relate to federal matters identified in the draft Environmental Impact Statement Guidelines (dEISg). As you are aware, federal matters include valued components (VC) of disciplines and themes listed in Table 4 (Valued Components and Selection Criteria) of the dEISg, such as fisheries and aquatic habitat, terrestrial wildlife and vegetation, surface water resources, and air quality. Please note that the list I have provided is not complete, and other disciplines and themes from Table 4 relate to federal matters. Section 15 (Requirements for Federal Environmental Assessments) of Part D (Federal Information Requirements) of the dEISg also lists federal matters that will be considered in the EA. In the tracking tables, please include a column titled "Comment Relates to Federal Interest." Entries in this column would identify the relation of the comment to federal matters identified in the dEISg. These entries could list the discipline/theme or VC from Table 4 or list items identified in Section 15 of the dEISg. This column would be left blank if the comment does not relate to federal matters listed in the dEISg.	The requested column (entitled 'Federal Interest') has been included in the Public Issues Tracking Table.	None proposed.
285		0 Natural Resources Canada	18-Oct-13	dAIR 2.1 (09Sept2013)	NRC-001	Section 5.4.4 Surface Water Resources – Baseline Conditions NRCan recommends adding the following statement to this section "Include characterization of the background conditions of the man-made groundwater channel." Additionally, the proponent may want to include the man-made groundwater channel in Table 4, under the heading of Surface Water Resources.	The background conditions of the man-made groundwater channel will be characterized.	Section 5.4.4 revised to include: <u>- Characterize the background conditions of the man-made groundwater channel.</u>
286		0 Natural Resources Canada	18-Oct-13	dAIR 2.1 (09Sept2013)	NRC-002	Section 5.5.4 Groundwater Resources – Baseline Conditions Bullet #6 of the first order bullets (regarding the RSA Conceptual Hydrogeological Model): NRCan recommends adding "Indicate groundwater divides" to the list of parameters to be characterized. NRCan also recommends adding the following, "It is recommended that the conceptual groundwater model include a cross section or cross sections of the site." The cross sections would ideally display the parameters listed by the proponent in this section.	Groundwater divides will be indicated. The groundwater model will include cross-section(s) of the site.	Sectopm 5.5.4 (bullet 4) revised as follows: Construct an RSA conceptual hydrogeological model based on collective information from all relevant hydraulic testing and chemistry testing data sources (including hydrology, geochemistry and geotechnical disciplines). The model will include representations of groundwater flow directions, <u>groundwater divides</u> , flow gradients (both vertical and/or horizontal, as required), water table positions, piezometric levels, major sediment and bedrock stratigraphy and structure, primary groundwater recharge areas, confirmed and/or interpreted aquifers, confirmed and interpreted groundwater discharge areas/locations, registered and unregistered water well locations, water licence POD locations and any other groundwater receptors identified through consultation with other Project disciplines. <u>The conceptual groundwater model will include a cross section (or cross sections) of the site.</u> Provide recommendations for additional monitoring, as warranted based on the conceptual hydrogeological model.
287		0 Natural Resources Canada	18-Oct-13	dAIR 2.1 (09Sept2013)	NRC-003	Section 5.5.5 Groundwater Resources – Effects Assessment First paragraph: NRCan recommends adding "Consider how changes to groundwater caused by the Project will impact surface water quantity and quality."	The EAC Application/EIS will consider how changes to groundwater caused by the Proposed Project will impact surface water quantity and quality.	Section 5.5.5 revised as follows: The assessment will use federal discharge requirements and evaluate potential effects of the Proposed Project on hydrogeology conditions, the groundwater regime, and groundwater quality. <u>The assessment will consider how changes to groundwater caused by the Proposed Project will impact surface water quantity and quality.</u>
288		0 Natural Resources Canada	18-Oct-13	dAIR 2.1 (09Sept2013)	NRC-004	Section 5.5.5 Groundwater Resources – Effects Assessment Bullet #1: NRCan recommends adding "Include a cross section that shows the site and its hydrogeologic properties at pit closure for the purpose of comparison with the conceptual hydrogeologic model cross section for baseline conditions. Indicate the hydrostratigraphic units (including hydraulic conductivity), groundwater flow directions and gradients, water table levels, groundwater divides and recharge and discharge areas, and the locations of the pit, groundwater channel and any other significant surface water features." NRCan also recommends adding the following to the section "Use the model to predict changes to the water table at various phases of the project and the potential for and potential effect of salt water intrusion into aquifers. Provide an assessment of how the project may affect the availability of groundwater for groundwater users and baseflow in surface waters."	A cross section will be provided that shows the site and its hydrogeologic properties at pit closure for the purpose of comparison with the conceptual hydrogeologic model cross section for baseline conditions. Hydrostratigraphic units (including hydraulic conductivity), groundwater flow directions and gradients, water table levels, groundwater divides and recharge and discharge areas, and the locations of the pit, groundwater channel and any other significant surface water features will be included. Use the model to predict changes to the water table at various phases of the Proposed Project and the potential for and potential effect of salt water intrusion into aquifers will be predicted. An assessment of how the project may affect the availability of groundwater for groundwater users and baseflow in surface waters will be provided.	Section 5.5.5 revised as follows: The assessment method approach is expected to include the following: - Prepare and use the numerical hydrogeological model to simulate groundwater conditions for the ultimate pit configuration and at Closure Phase and Post-Closure Phase (as described in Spatial Boundary). <u>Include a cross section that shows the site and its hydrogeologic properties at pit closure for the purpose of comparison with the conceptual hydrogeologic model cross section for baseline conditions. Indicate the hydrostratigraphic units (including hydraulic conductivity), groundwater flow directions and gradients, water table levels, groundwater divides and recharge and discharge areas, and the locations of the pit, groundwater channel and any other significant surface water features.</u> - <u>Use the model to predict changes to the water table at various phases of the Proposed Project and the potential for and potential effect of salt water intrusion into aquifers. Provide an assessment of how the project may affect the availability of groundwater for groundwater users and baseflow in surface waters.</u>
289		0 Natural Resources Canada	18-Oct-13	dAIR 2.1 (09Sept2013)	NRC-005	Section 5.5.5 Groundwater Resources – Effects Assessment Bullet #3: NRCan recommends adding the following, "including potential changes to the groundwater channel resulting from the Project and potential changes to groundwater resulting from project-induced changes to the channel."	Potential changes to the man-made groundwater channel resulting from the Proposed Project and potential changes to groundwater resulting from project-induced changes to the channel will be assessed.	Section 5.5.5 revised as follows: - Use the numerical model to predict and characterise potential changes to LSA and RSA groundwater surface water interactions (i.e., baseflow), <u>including potential changes to the man-made groundwater channel resulting from the Proposed Project and potential changes to groundwater resulting from project-induced changes to the channel.</u> Identify potentially affected receptors.

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290	Hatziantoniou, Yota	Health Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	HC-003	HC suggests that distances to the locations of First Nations reserves, temporary First Nation use sites (i.e. areas used for ceremonial purposes, fishing/hunting camps etc.), and other temporary human receptor sites (i.e. youth camps) in the Howe Sound area be provided, where applicable.	Issue discussed with HC on 10Dec2013. The dAIR/EISg will be revised to include distances to First Nations reserves, temporary First Nation use sites (i.e. areas used for ceremonial purposes, fishing/hunting camps etc.), and other temporary human receptor sites (i.e. youth camps) in the Howe Sound area, where applicable.	Section 2.2 revised to include: - Indication of the distance to nearby communities <u>and temporary human receptor sites (i.e., youth camps) in the Howe Sound area</u> , and notations for the communities <u>these locations</u> on the regional map; - Description of the Aboriginal groups' traditional territories in which the Project is proposed to take place; - <u>Indication of the distance to the locations of First Nations reserves and temporary First Nation use sites (i.e., areas used for ceremonial purposes, fishing/hunting camps, etc.);</u>
291	Hatziantoniou, Yota	Health Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	HC-004	The generation of fugitive dust from stockpiles is not addressed in this section. HC advises that mitigation measures be provided (i.e. fine water spray) for the sand/gravel that will be stockpiled in the project area (as described on pg. 14), in order to avoid and limit fugitive dust during material deposition and/or draw-down.	Issue discussed with HC on 10Dec2013. Section 5.7.6 will provide mitigation measures and environmental management strategies to avoid, limit, or otherwise mitigate potential effects of the Proposed Project on air quality VCs, including watering and a berm along the east and south side of the plant.	None proposed.
292	Hatziantoniou, Yota	Health Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	HC-005	Please note that the National Ambient Air Quality Objectives (NAAQOs) only provide reference levels for PM2.5 and PM10 (not actual objectives). Canada-wide Standards (CWS) currently exist for PM2.5 and ozone, however these will be replaced by new Canadian Ambient Air Quality Standards (CAAQs). The CAAQs provide more stringent objectives for outdoor air quality in Canada and will begin to take effect in 2015. CAAQs have been developed for particulate matter and ground-level ozone, and work has begun on standards for NO2 and SO2. As it may take several years for the Project (if approved) to proceed to construction and operation, Health Canada advises that CAAQs be considered as indicators in the assessment of air quality, where applicable.	Issue discussed with HC on 10Dec2013. The BC Air Quality objective was updated in August 2013 and is more stringent than the CAAQs .	Section 5.6.3.3 revised to include: - <u>B.C. Ambient Air Quality Objectives (BCMOE 2013b)</u>
293	Hatziantoniou, Yota	Health Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	HC-006	In this section, Health Canada advises that the Proponent add references to the Canada-wide Standards for Particulate Matter (PM) and Ozone (2010), and the Canadian Ambient Air Quality Standards for Fine Particulate Matter and Ozone (2012).	Issue discussed with HC on 10Dec2013. The BC Air Quality objective was updated in August 2013 and is more stringent than the CAAQs .	Section 9.1.3.3 revised to include: - <u>B.C. Ambient Air Quality Objectives (BCMOE 2013b)</u>
294	Hatziantoniou, Yota	Health Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	HC-007	Health Canada advises that a generic statement be added to this section to indicate that: If risks to human health resulting from changes to the bio-physical environment (ie. air, water, contamination of country foods) are predicted, a human health risk assessment (HHRA) examining all exposure pathways for any pollutants of concern may be necessary to adequately characterize potential risks to human health.	Issue discussed with HC on 10Dec2013. Acknowledged.	Section 9.1.5 revised to include: <u>If risks to human health resulting from changes to the bio-physical environment (i.e., air, water, contamination of country foods) are predicted, a human health risk assessment (HHRA) examining exposure pathways for any pollutants of concern may be necessary to adequately characterize potential risks to human health.</u>
295	Hatziantoniou, Yota	Health Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	HC-008	With respect to describing noise levels in locations where the public is likely to be exposed to noise from the proposed project, HC advises that baseline field measurements be taken both at sea-level and at higher elevations where residences are present. Multiple field measurements would help to adequately characterize the existing sound environment, and more accurately predict cumulative (baseline + project) noise levels that may be experienced during project construction and operation.	Issue discussed with HC on 10Dec2013. Acknowledged. Baseline field measurements be taken both at sea-level and at higher elevations where residences are present.	Section 9.2.3.3. revised as follows: The assessment approach for noise will include the following: - Describe existing noise levels in locations where the public is likely to be exposed to noise from the Proposed Project. Existing noise levels will be characterised by baseline field measurements <u>taken both at sea-level and at higher elevations where residences are present;</u>
296	0	Fisheries and Oceans Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	DFO-007	Project impacts to all species of interest and fisheries should be addressed. This includes all salmonids, shellfish and marine mammals identified. Potential impacts to the fisheries present including salmonids, shellfish (shrimp, crab etc) etc. should be identified and discussed including the interaction with all activities present at the location (project activities and logging activities) and their impacts on the fish, fisheries, fishing access etc.. It is unclear from the choosen VCs if this will be accomplished. An expansion of the VCs to more fully capture these groups of species should occur.	Project impacts to all species of interest and fisheries will be addressed. In some cases where multiple candidate VCs may be affected by the Proposed Project in the same or similar ways. It is appropriate to select a subset of the candidate VCs for detailed analysis to avoid redundancy in analysis. VCs selected to assess potential effects on salmonids, shellfish and marine mammals are: - Anadromous chum, coho salmon and Cutthroat trout species and their habitats; - Freshwater resident trout and their habitats (Cutthroat trout); - Marine Benthic communities (fauna and flora); and - Marine Mammals Shellfish are a part of Marine Benthic Communities VC which include epiflora (benthic macro-vegetation), epifauna (invertebrate animals living on the bottom substrate) and infauna (macro-invertebrates living in the bottom substrate). Parameters measured for benthic communities are abundance, taxonomic composition and diversity. Assessment indicators for marine mammals are mortalities, injuries or behavioral changes. Selected VCs will be revised to present Marine Resource VCs separate from Fisheries and Freshwater Habitat VCs. Forage fish (herring) and their habitat will be specifically included as a VC.	Table 4 revised to distinguish between Fisheries and Freshwater Habitat VCs and Marine Resource VCs. Section 5.1 was also revised to reflect this change. Rationale for selected fisheries VCs supplemented to include: - <u>Both Chum and Coho have significant value as commercial, recreational, and First Nations fisheries and have specific habitat requirements which are provided for within the Project area. Chum Salmon use freshwater habitats seasonally whereas Coho use these habitats year-round, for spawning, rearing, and overwintering. These populations rely on the integrity of McNab Creek and, specifically with Coho, the ground water channels along the foreshore of the property. Any impacts to the quality and/or quantity of these habitats would be directly observable in the numbers of these VCs.</u> Table 4 revised to include Forage fish (herring) and their habitat as a VC.

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297		Fisheries and Oceans Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	DFO-008	Through discussions with the Squamish Nation on Oct. 7, 2013, concerns were raised that herring and freshwater benthic communities were not selected as Value Components (VCs). They stated that herring was an important historical fishery for the Squamish Nation and that herring have recently been observed returning to the area. They also stated that Humpback whales (listed as threatened under the Species At Risk Act) were recently spotted in the area. It was unclear if Burnco was aware of their presence and thus, it was unclear whether these would be included within the marine mammal VCs. Consideration should be made with respect to the inclusion of these as VCs and if not included, rationale should be provided addressing reasons for decision.	Forage fish (herring) and their habitat will be specifically included as a VC. Freshwater benthos has been considered but is not included as a selected VC since attention to higher trophic level VCs (salmonids), supplemented with water quality monitoring are expected to be adequate to address the anticipated impacts of the project upon the LSA and RSA. Impacts from the project that may affect benthos are expected to be monitored through water quality sampling. Potential effects on Humpback whales will be assessed as part of the Marine Mammals VC.	Table 4 revised to include Forage fish (herring) and their habitat as a VC, as well as to specify Humpback whales as part of the Marine Mammals VC.
298		Fisheries and Oceans Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	DFO-009	"Habitat compensation area will depend on the amount of remaining habitat loss after the development and implementation of the mitigation and environmental management strategies" The area extent of the HADD and the amount of compensation must be determined and included within the EIS. If the size of the HADD and compensation is dependent on the development and implementation of the mitigation and environmental management strategies, these should be developed and included within the EIS along with commitments to follow them.	Acknowledged. The area extent of the HADD and the amount of compensation will be determined and included within the EAC Application/EIS. Mitigation and environmental management strategies will be developed and included within the EAC Application/EIS, along with commitments to follow them.	None proposed.
299		Fisheries and Oceans Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	DFO-010	A detailed fish habitat compensation plan which clearly describes and quantifies the harmful alteration, disruption and destruction of fish habitat (HADD) expected from the project and provides feasible options for compensating for these losses is required.	A detailed fish habitat compensation plan that clearly describes and quantifies the harmful alteration, disruption and destruction of fish habitat (HADD) expected from the Proposed Project and provides feasible compensation options will be provided in the EAC Application/EIS.	Section 5.1.6 revised to include: <u>A detailed fish habitat compensation plan that clearly describes and quantifies the harmful alteration, disruption and destruction of fish habitat (HADD) expected from the Proposed Project and provides feasible compensation options will be provided in the EAC Application/EIS.</u>
300		Fisheries and Oceans Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	DFO-011	"Fish sampling at reconnaissance sites will be consistent with RISC standards and will consist of a single pass" Clarification should be provided on the intent and scope of this sampling. It is our understanding from the on-site visit September 2013, that extensive fisheries surveys were being conducted.	The fish surveys within the LSA consisted of multi-pass removal, multiple sampling events, within the perennial channels. This "single pass" method referred to in this section refers to sampling of intermittent and ephemeral channels and within channels outside of the Project Area to inform fish presence/absence at these locations.	Section 5.1.4 revised to clarify intent and scope of sampling.
301		Fisheries and Oceans Canada	12-Nov-13	dAIR 2.1 (09Sept2013)	DFO-012	It is unclear where the intertidal channels within the foreshore footprint are located within this document. These channels need to be described, habitat values assessed and potential impacts from the project on these channels including potential changes in hydrology need to be discussed. Mitigation measures to reduce extent of impacts and risk of impacts should be discussed. These channels should form part of the environmental monitoring program to confirm the extent of the predicted change or to confirm that they are not impacted if this is predicted.	The intertidal channels along the foreshore which are fed by groundwater upstream on the McNab Property are subject to a habitat assessment, which includes identifying habitat values and potential project impacts on the VCs, and can be found in sections 5.1.4 and 5.1.5. Hydrological analyses of potential impacts to surface water and groundwater resources will be presented in the EAC Application/EIS.	Revised Section 5.1.4 to include: - Fish populations and relative abundance will be evaluated in several locations within the fish habitats directly affected by the mine footprint and downstream where populations may be affected by changes in water quality or quantity. <u>This includes the groundwater channels within the LSA foreshore and intertidal area.</u>
302	Inouye, Kevin	Canadian Environmental Assessment Agency	12-Nov-13	dAIR 2.1 (09Sept2013)	CEAA-012	For the previous versions of the Project, the typical hours of operation are listed at 12 hrs/day, 260 days/year. 5 days/week is the same as 260 days/year. For consistency and ease of understanding, please list 260 days/year if that would still be correct.	Table 2 revised to state typical hours of operation as days per year.	Typical hours of operation of current proposal in Table 2 revised as follows: 8 to 10 hrs/day, <u>260 days/yr (i.e., 5 days/week)</u> during seasonal daylight hours
303	Inouye, Kevin	Canadian Environmental Assessment Agency	12-Nov-13	dAIR 2.1 (09Sept2013)	CEAA-013	Please update this sentence to clarify whether logging did begin again in 2012.	Sentence has been updated to clarify that harvesting has been occurring in the upper watershed since 2012.	Section 2.2.1.1 revised as follows: Logging activity in the valley dates back to 1900 and has continued on the site <u>most recently with renewed forest harvesting expected to begin again</u> in the upper watershed in since 2012.
304	Inouye, Kevin	Canadian Environmental Assessment Agency	12-Nov-13	dAIR 2.1 (09Sept2013)	CEAA-014	According to Table 2, sedimentation ponds are no longer a part of the project. Should the reference to the sediment pond be removed?	Reference to sediment ponds has been removed.	Section 2.2.5 revised as follows: Site planning will include landscaping, further design and development of the existing training berm along the north edge logging road of the pit area, along with the creation of southern pit containment berm, sediment pond surface water features, fisheries habitats and revegetation throughout the site consistent with the operational extraction schedule.
305	Inouye, Kevin	Canadian Environmental Assessment Agency	12-Nov-13	dAIR 2.1 (09Sept2013)	CEAA-015	Please provide a detailed description of the geographic extent of the marine shipping that will be included in the federal scope. The description of the scope for shipping must be consistent with my letter dated November 12, 2013, to BURNCO, where I confirmed the geographic extent of the marine shipping for the BURNCO project.	A detailed description of the geographic extent of the scope of assessment of marine shipping consistent with the CEA Agency's letter dated November 12, 2013 will be incorporated.	Section 2.4 revised to include the following detailed description of the geographic extent of the marine shipping that will be included in the federal scope: <u>The scope of assessment of the marine shipping component of the Proposed Project consists of the barge traffic in Howe Sound, Ramillies Channel, Thornbrough Channel, and Queen Charlotte Channel (south of Passage Island) (Figure 4). The scope does not include shipping from where the barges meet the existing shipping lanes in the Strait of Georgia and in the Fraser River to BURNCO's existing facilities in Burnaby and Langley.</u>
306	Inouye, Kevin	Canadian Environmental Assessment Agency	12-Nov-13	dAIR 2.1 (09Sept2013)	CEAA-016	For the significance evaluation, probability (i.e., likelihood of the predicted effect occurring) will be considered with magnitude, geographic extent, duration and frequency, reversibility and context. This methodology is not consistent with the federal approach for the evaluation of significance. As outlined in the <i>Reference Guide for the Canadian Environmental Assessment Act: Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects</i> (Prepared by the Federal Environmental Assessment Review Office - November 1994), likelihood is considered after the significance evaluation that includes magnitude, geographic extent, duration and frequency, reversibility, and ecological context. The significance evaluation for the federal EA must be consistent with the federal guidance for the evaluation of significance to meet the requirements of the former Act. The significance methodology will need to include an evaluation that will meet the federal requirements.	Acknowledged.	Section 15 revised as follows: Significance Assessment / Analysis – The EAC Application/EIS will provide a description of the significance of the residual environmental effects identified in Sections 5.0 - 9.0. The assessment of significance will be conducted in accordance with the methods described in Section 4.0 of the EAC Application/EIS. The significance assessment will follow <u>A Reference Guide for the Canadian Environmental Assessment Act: Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects (Prepared by the Federal Environmental Assessment Review Office, November 1994 federal guidelines (FEARO 1994)).</u>

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307	Inouye, Kevin	Canadian Environmental Assessment Agency	12-Nov-13	dAIR 2.1 (09Sept2013)	CEAA-017	Include a list of the potentially affected Aboriginal groups identified by the Agency. This list is included in my letter dated November 12, 2013.	The EAC Application/EIS will identify potentially affected Aboriginal groups names in the BCEAO Section 11 Order or as otherwise identified by the CEA Agency, including the following list of the potentially affected Aboriginal groups identified in the CEA Agency's letter dated November 12, 2013: - Squamish Nation - Musqueam Indian Band; - Tsleil-Waututh Nation; - Stz'uminus First Nation; - Cowichan Tribes; - Halalt First Nation; - Lake Cowichan First Nation; - Lyackson First Nation; - Penelakut Tribe; and - Métis Nation British Columbia.	None proposed.
308	Inouye, Kevin	Canadian Environmental Assessment Agency	12-Nov-13	dAIR 2.1 (09Sept2013)	CEAA-018	A definition of an "environmental effect" under the former Act is included immediately above this bullet. This bullet will need to reference this definition. Please add "...and the definition of an 'environmental effect' above." to the end of this sentence.	Acknowledged.	Section 15 revised as follows: Environmental Effects – The EAC Application/EIS will include a description of any potential changes that the Proposed Project may cause on the environment, consistent with the federal scope of the assessment <u>and the definition of an 'environmental effect' above.</u>
309	Inouye, Kevin	Canadian Environmental Assessment Agency	12-Nov-13	dAIR 2.1 (09Sept2013)	CEAA-019	Please note that the significance assessment methods outlined in Section 4.0 are not consistent with federal requirements (see comment # 17).	Acknowledged.	Section 15 revised as follows: Significance Assessment / Analysis – The EAC Application/EIS will provide a description of the significance of the residual environmental effects identified in Sections 5.0 - 9.0. The assessment of significance will be conducted in accordance with the methods described in Section 4.0 of the EAC Application/EIS. The significance assessment will follow <u>A Reference Guide for the Canadian Environmental Assessment Act: Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects (Prepared by the Federal Environmental Assessment Review Office, November 1994 federal guidelines (FEARO 1994)).</u>
310	Hendersen, Tracy	Ministry of Environment, Environmental Protection	21-Nov-13	dAIR 2.1 (09Sept2013)	MOE-EP-005.1	Comment ID #130 [Ref MOE-EP-005]. MoE stresses that the proponent includes a comprehensive adaptive management framework, complete with effectiveness evaluations of any mitigative steps taken, as part of the environmental monitoring and follow up program. ----- Ref MOE-EP-005: Ongoing monitoring for dust and water quality parameters will also need to be outlined and rationalized. Again, performance measures and adaptive management strategies, for when measures are not achieved, will need to be documented for water quality as well as air quality. The whole process will need to be shown in an adaptive management framework, complete with effectiveness evaluations of any mitigative steps taken.	Acknowledged. The EAC Application/EIS will include a comprehensive adaptive management framework, complete with effectiveness evaluations of mitigative steps taken, as part of the environmental monitoring and follow up program. ----- Ref Response to MOE-EP-005: Acknowledged. Section 13 will be revised to include adaptive management as a feature of the environmental monitoring and follow-up program. Section 13.0 revised as follows: "- Effectiveness assessment, <u>including adaptive management</u> , of mitigation measures being applied against proposed to mitigate potential environmental effects."	None proposed.
311	Hendersen, Tracy	Ministry of Environment, Environmental Protection	21-Nov-13	dAIR 2.1 (09Sept2013)	MOE-EP-007.1	Comment ID #132, 133, 134 [Ref MOE-EP-007, 008, 009]. MoE stresses that the proponent includes the recommended monitoring as indicated in initial comments: 132, 133, and 134 (sediment and benthic invertebrates). See below. ----- Ref MOE-EP-007: Table 3 - 'fish species are appropriate sentinels...' Higher trophic level organisms such as fish may not be good sentinels for direct impacts, especially in the short term. Invertebrates as sentinels could strengthen the resulting environmental impact assessment process, in both the freshwater and marine environments.	Marine benthic communities are a selected VC for assessing potential effects on marine resources. Parameters measured for benthic communities are abundance, taxonomic composition and diversity. Freshwater benthos has been considered but is not included as a selected VC since attention to higher trophic level VCs (salmonids), supplemented with water quality monitoring are expected to be adequate to address the anticipated impacts of the project upon the LSA and RSA. Impacts from the project that may affect benthos are expected to be monitored through water quality sampling. ----- Ref Response to MOE-EP-007: Acknowledged that the use of benthic invertebrates and periphyton often provide meaningful indices for monitoring change in aquatic environments. Marine benthic invertebrates have been collected as part of the marine surveys. No freshwater benthic invertebrate monitoring was undertaken given the large variation in hydrograph in all streams and creeks surrounding the site. Initial surveys of benthic invertebrates indicated limited homogenous environments to monitor invertebrates in freshwater in a statistically robust manner. Complete periods of dry conditions were observed in all streams and creeks in the area including McNab Creek. Ongoing forest harvesting activities in the entire watershed, peak flood events, and low flow events will have strong impacts on freshwater benthic invertebrate density and community structure. No change to dAIR/EISg proposed.	None proposed.

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312	Hendersen, Tracy	Ministry of Environment, Environmental Protection	21-Nov-13	dAIR 2.1 (09Sept2013)	MOE-EP-008.1	<p>Comment ID #132, 133, 134 [Ref MOE-EP-007, 008, 009]. MoE stresses that the proponent includes the recommended monitoring as indicated in initial comments: 132, 133, and 134 (sediment and benthic invertebrates). See below.</p> <p>-----</p> <p>Ref MOE-EP-008: Particle size composition, coupled with chemical analyses, could be a good monitoring parameter for marine sediments. There may be some value in determining how much of the particle material is organic versus non-combustible. Before/after data for these tests could correlate with the proposed benthic invertebrate monitoring.</p>	<p>Particle size composition and chemical analyses, including organic carbon content as well as concentrations of metals are assessment endpoints for the Marine Sediment VCs. They are a part of baseline studies and included in EA and effect monitoring program. Sediment sampling is coupled with benthic invertebrate samples for substrate correlation/comparison.</p> <p>-----</p> <p>Ref Response to MOE-EP-008: Acknowledged. Organic/non-combustible ratios of particle material and correlation with benthic invertebrate monitoring will be considered. No change to dAIR/EISg proposed.</p>	None proposed.
313	Hendersen, Tracy	Ministry of Environment, Environmental Protection	21-Nov-13	dAIR 2.1 (09Sept2013)	MOE-EP-009.1	<p>Comment ID #132, 133, 134 [Ref MOE-EP-007, 008, 009]. MoE stresses that the proponent includes the recommended monitoring as indicated in initial comments: 132, 133, and 134 (sediment and benthic invertebrates). See below.</p> <p>-----</p> <p>Ref MOE-EP-009: Water quality monitoring in surface fresh and marine waters may require additional monitoring. In surface water systems, substrate sedimentation could be added, focusing on particle size composition, while in marine surface waters, extinction depth measurements (simply using a Secchi disc) may also prove useful.</p>	<p>Suspended solids and turbidity are a part of water quality parameters that are analyzed and are monitored in both fresh and marine water to comply with CCME and BCMOE guidelines. Secchi depth and euphotic depth were measured as a part of marine water quality studies and will be included in effect monitoring program.</p> <p>-----</p> <p>Ref Response to MOE-EP-009: Acknowledged. Additional monitoring will be considered in developing the environmental monitoring and follow-up program. No change to dAIR/EISg proposed.</p>	None proposed.
314	Hendersen, Tracy	Ministry of Environment, Environmental Protection	21-Nov-13	dAIR 2.1 (09Sept2013)	MOE-EP-011.1	<p>Comment ID #136 [Ref MOE-EP-011]. MoE stresses that the proponent includes Newcombe severity-of-ill-effects (SEV) approach in conjunction with the discussion on duration and frequency section that defines short, medium, and long term impacts. Newcombe developed a visual clarity model which relates the severity-of-ill-effects for clear-water fish species to acute threshold dose, where dose is a function of the magnitude and duration of exposure to individual "turbidity events". This model can be used to assess the relative risk that turbidity events may pose to clear water fish, as well as and a means to categorize the severity of the risk.</p> <p>-----</p> <p>NEWCOMBE, C.P. (2003) Impact Assessment for Clear Water Fishes Exposed to Excessively Cloudy Water. Journal of the American Water Resources Association, 39 (3), pp. 529-544.</p> <p>-----</p> <p>Ref MOE-EP-011: The Duration and Frequency discussion defines short-term, medium-term and long-term with respect to project phases. Instead, the duration and frequency aspects of environmental impacts should use scientific definitions, as quantified by Newcombe with his Severity of Ill Effects approach for total suspended solids and turbidity levels.</p>	<p>In addition to the discussion on duration and frequency section that defines short, medium, and long term impacts and references Federal (CCME) and Provincial (MoE Ambient Water Quality Guidelines for Turbidity, Suspended and Benthic Sediments), the water quality assessment will include specific reference to the Newcombe severity-of-ill-effects (SEV) approach and will be incorporated into the Residual Effects Criteria.</p> <p>-----</p> <p>Ref Response to MOE-EP-011: Accepted assessment methodology contemplates short, medium, long term as criteria for duration and frequency of potential effects. No change to dAIR/EISg proposed.</p>	None proposed.
315	Inouye, Kevin	Canadian Environmental Assessment Agency	2-Dec-13	dAIR 2.1 (09Sept2013)	CEAA-020	<p>This Section will need to specify that the proponent will submit a standalone EIS Summary document along with the EIS. To facilitate public participation, a summary of the EIS will be available in both official languages on the Agency's website. Please note that the Agency requests a French translation of the EIS Summary for the public comment period. The EIS Summary document for the Kitsault Mine Project is available on the Canadian Environmental Assessment Registry website at www.ceaa-acee.gc.ca/050/index-eng.cfm (reference number 57958). You may refer to this Summary as an example document if that would be helpful.</p>	Acknowledged.	<p>dAIR/EISg revised to state that: <u>The Executive Summary to the EAC Application/EIS will be provided in both official languages (English and French).</u></p> <p>Section 15 revised to include: <u>Bilingual Summary - To facilitate public participation and review, a summary of the EAC Application/EIS will be provided in both official languages (English and French).</u></p>
316	Inouye, Kevin	Canadian Environmental Assessment Agency	24-Dec-13	dAIR 2.1 (09Sept2013)	CEAA-021	<p>This Section will need to capture all of the "factors to be considered" under Section 16 of the former Act. Section 16(2)(b) (alternative means of carrying out the project that are technically and economically feasible and the environmental effects of any such alternative means) and Section 16(2)(d) (the capacity of renewable resources that are likely to be significantly affected by the project to meet the needs of the present and those of the future) have not been addressed. All factors listed in Section 16 will need to be considered.</p>	Acknowledged. Section 2.5 is designed to address both provincial and federal requirements for alternatives assessment. Section 15 will be revised to explicitly include these additional "factors to be considered" required by the former CEAA.	<p>Section 15 revised to include: <u>- Alternative Means – The EAC Application/EIS will include an evaluation alternative means of carrying out the Proposed Project that are technically and economically feasible and the environmental effects of any such alternative means. The assessment of alternative means presented in Section 2.5 will be sufficient to meet both federal and provincial requirements.</u> <u>- Capacity of Renewable Resources – The EAC Application/EIS will include an analysis of the capacity of renewable resources to meet the needs of the present and those of the future where these resources are likely to be significantly affected by the Proposed Project.</u></p>
317	Veale, Graham	Ministry of Environment, Environmental Protection	10-Mar-14	dAIR 2.3 (26Feb2014)	MOE-EP-044	<p>While acceptable from an air quality perspective, the elimination of Dustfall from the list of Air Quality Indicators (VC's) in Table 4 may be problematic if particulate deposition is identified as a concern by reviewers/regulators in other disciplines. The proponent should ensure that there are not aquatic or terrestrial deposition concerns identified (e.g. vegetation smothering, country food contamination, sedimentation, metals accumulation) which might be informed by Dustfall assessment before eliminating this parameter as a VC.</p>	<p>Particulate deposition resulting from project operations will be quantified and provided to other technical disciplines (including Public Health) for use in their respective assessment reports.</p>	<p>Table 4 revised to include: <u>- Particulate deposition resulting from project operations will be quantified to be used in the Public Health and other assessments, as needed.</u></p>

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318	Veale, Graham	Ministry of Environment, Environmental Protection	10-Mar-14	dAIR 2.3 (26Feb2014)	MOE-EP-045	For completeness, suggest including the Sea-to-Sky Air Quality Management Plan in the list of "...legislation, standards, protocols and guides..." identified at the end of the section.	Acknowledged.	Section 5.7.3.3. revised to include: - <u>Sea-to-Sky Air Quality Management Plan</u>
319	Veale, Graham	Ministry of Environment, Environmental Protection	10-Mar-14	dAIR 2.3 (26Feb2014)	MOE-EP-046	2nd bullet – the most recent provincial emissions inventory was published in 2013 (based on 2010 data) and is available on the BC Air Quality website at http://www.bcairquality.ca/reports/cac_emission_inventory2010.html	Acknowledged.	Section 5.7.4 revised as follows: - Review existing air quality data available in the area of the site (i.e., most recent provincial emissions inventory (BCMHS 2009 <u>BCMOE 2013c</u>) and Sea-to Sky Airshed Emissions Inventory of Common Air Contaminants (Pitre 2002)), and identification of what further air quality data would be required to determine baseline conditions. Should no such data be available, baseline monitoring of indicators such as total suspended particulate (TSP), particulate matter less than 10 micron (PM10), and particulate matter less than 2.5 micron (PM2.5) may be required. Section 21.0 revised to include BCMOE 2013c.
320	Pearce, Tom	Metro Vancouver	13-Mar-14	dAIR 2.3 (26Feb2014)	MV-001	I think it should read "will be provided" in the first paragraph.	Acknowledged.	Section 4.4 revised as follows: For each discipline-specific study, detailed summaries of current baseline conditions will <u>be</u> provided based on existing reports, data collection and analysis, consideration of <u>available</u> traditional ecological knowledge and field and laboratory methods.
321	Brzozowski, Aleksandra	Islands Trust Gambier Local Trust Committee	25-Mar-14	dAIR 2.3 (26Feb2014)	ITNO-009	Marine Habitat Mapping In the earlier round of comments on the dAIR, Islands Trust noted that forage fish habitat and marine nursery areas like eelgrass and kelp beds should be mapped and included as part of the baseline conditions for future impact assessments. In August 2013, the proponent responded that eelgrass mapping would be added to the Marine Baseline Conditions. We note that the most current version of the dAIR has removed specific references to eelgrass mapping, leaving only "fish habitat" which is quite vague. We request that the following italicized in red be added back to Section 5.14: "Maps showing all fish habitats (including eelgrass beds, kelp beds, Pacific Sand Lance, and Surf Smelt), sampling locations, and sampling results."	Eelgrass beds was appropriately removed from the mapping of freshwater aquatic habitat in Section 5.1.4 and will be explicitly incorporated into the new section 5.2.4 (Marine Resource Baseline Conditions).	Section 5.2.4, bullet 4, revised as follows: - LSA and RSA habitat mapping (<u>including eelgrass and kelp beds</u>) will be completed as a part of <u>based on</u> field and desk-top studies.
322	Brzozowski, Aleksandra	Islands Trust Gambier Local Trust Committee	25-Mar-14	dAIR 2.3 (26Feb2014)	ITNO-010	Forage Fish The revised draft AIR has added "Forage Fish (herring)" to the list of valued components. In addition to herring, we reiterate our earlier comment that shore spawners like Surf Smelt and Pacific Sand Lance should be considered Valued Components because of their importance in marine food webs. This is an important distinction due to the fact that herring spawns in the water while other forage fish like Surf Smelt and Pacific Sand Lance spawn on the foreshore itself.	Acknowledged. Potential effects on surf smelt and Pacific sand lance have been assessed and will be included in the EAC Application/EIS. Surf smelt and Pacific sand lance have not been observed in the northern shore areas of upper Howe Sound and the proposed Project area does not comprise suitable habitats for spawning. Discussion of both species and habitats available to support these species will be provided.	Table 4 revised to include surf smelt and Pacific sand lance in addition to herring in assessing potential effects on forage fish.
323	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	27-Mar-14	dAIR 2.3 (26Feb2014)	FLNRO-020	It is advised to mention the Conditional Water Licence number along with the maximum diversion volume under this section.	Water licence number and max diversion volume will be provided.	Table 3 revised to include: <u>(License No. C044938 for 27.277 m3/d)</u>
324	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	27-Mar-14	dAIR 2.3 (26Feb2014)	FLNRO-021	Repetition of "assessment". Is it a typo or I am missing something?	Typo to be corrected.	Section 4.2 revised as follows: - Assessment of assessment boundaries;

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325	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	27-Mar-14	dAIR 2.3 (26Feb2014)	FLNRO-022	Is it 100-year or 200-year dry and wet events?	Should be 5 and 10 year dry events and 200 year wet events.	Section 5.5.4 revised as follows: - Estimation of stream flows: The following characteristics will be estimated for relevant stream locations for the Proposed Project: Annual and monthly average and extremes (<u>5 and 10 year dry events</u> and 100 200 year dry and wet events), the 7Q10 flow for the ice-cover (winter) and open-water (spring/summer/fall) periods, and the peak flow (10 year return period). The relevant stream locations will be finalized during baseline characterization, and would typically be at the boundaries of the LSA and RSA, where compliance with aquatic thresholds and guidelines are required, and where needed for the operations of the aggregate mine. Annual and monthly flow estimates will be determined from statistical analyses and the rational method. The 7Q10 events will be estimated from statistical analysis. The peak flow will be estimated using HEC-HMS <u>and verified with observed data</u> . These stream flows will characterise baseline conditions and will be compared with those predicted for the other phases of the Proposed Project to evaluate the potential impacts of mine development on the VCs. Section 5.5.5 also revised as follows: - Estimation of stream flows at the relevant stream locations selected during the baseline characterization to assess the potential effects of the Proposed Project. Stream flows will be estimated for each phase of the development, and will consider the results of the water management plan, site water balance and assessment of potential effects. The estimated stream flow characteristics will be low flows (i.e., 7Q10), annual and monthly average and extremes (<u>5 and 10 year dry events</u> and 200 year dry and wet events), and peak flow (10-year return period).
326	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	27-Mar-14	dAIR 2.3 (26Feb2014)	FLNRO-023	It is advisable to write "The peak flow will be estimated using HEC-HMS and be verified with observed data", as I like to see the model calibration and verification result.	Section 5.5.4 will be revised as requested.	See FLNRO-022.
327	Akhtar, Khaled	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	27-Mar-14	dAIR 2.3 (26Feb2014)	FLNRO-024	Is there any plan to consider Climate Change while identifying and evaluating potential effects of the proposed project on local water level, stream flow and groundwater? It may be worthwhile to do so considering the lifespan of the proposed project.	Section 15 includes requirements for the EAC Application/EIS to identify the environmental factors deemed to have possible consequences on the Proposed Project, including climate change.	None proposed.
328		0 Fisheries and Oceans Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	DFO-013	<p>On November 25, 2013, the fisheries protection provisions of the Fisheries Act came into force. The new Fisheries Protection Program contains a new prohibition that combines the previous section 32 and section 35. The new prohibition manages threats to fish that are part of or support commercial, recreational or Aboriginal fisheries with the goal of ensuring their productivity and ongoing sustainability.</p> <p>The new prohibition is also supported by definitions of commercial, recreational and Aboriginal fisheries in the Act, as well as a definition of "serious harm to fish", which is the death of fish or any permanent alteration to, or destruction of, fish habitat.</p> <p>The Department interprets serious harm to fish as:</p> <ul style="list-style-type: none"> • the death of fish; • a permanent alteration to fish habitat of a spatial scale, duration or intensity that limits or diminishes the ability of fish to use such habitats as spawning grounds, or as nursery, rearing, or food supply areas, or as a migration corridor, or any other area in order to carry out one or more of their life processes; • the destruction of fish habitat of a spatial scale, duration, or intensity that fish can no longer rely upon such habitats for use as spawning grounds, or as nursery, rearing, or food supply areas, or as a migration corridor, or any other area in order to carry out one or more of their life processes. <p>The DFO website has been updated with new information and requirements. http://www.dfo-mpo.gc.ca/pnw-ppe/fpp-ppp/index-eng.html. For an overview of the changes to the Act, see Changes to the Fisheries Act.</p> <p>DFO's previous Policy for the Management of Fish Habitat (DFO 2001) and Practitioners Guide to Habitat Compensation (2002) have been replaced with "Fisheries Productivity Investment Policy: A Proponent's Guide to Offsetting and Fisheries Protection Policy. These, along with other guidance documents useful to this project can be found on DFO's projects near water website under guidance</p>	Acknowledged.	None proposed.

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329		0 Fisheries and Oceans Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	DFO-014	Splitting of the valued ecosystem components and the aquatic section into freshwater and marine may lead to the anadromous fish species only being considered in the freshwater system. The EIS application should clearly demonstrate how anadromous species may be affected by the Project during all phases of their life cycle which includes both freshwater and marine phases since many of the salmonid juveniles utilize the intertidal and subtidal zones of the McNabb estuary.	Potential effects on anadromous fish through all life stages, including intertidal and subtidal zones of the McNab estuary will be assessed in section 5.1 (Fisheries and Freshwater Habitat) and reflected in section 5.2 (Marine Resources). The LSAs for these components overlap to ensure that no phase of their life stage is missed.	Section 4.3.1 revised to include: <u>Proposed LSAs and RSAs are presented in Appendix A.</u> Series of study area maps have been included as Appendix A.
330		0 Fisheries and Oceans Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	DFO-015	Splitting the section Fisheries and Aquatic Habitat into two sections titled "Fisheries and Freshwater Habitat" and "Marine Resources" may lead to information regarding marine fish and marine habitat being omitted. The EIS application should clearly demonstrate how commercial, recreational and aboriginal fisheries may be affected by the Project and include discussion of both the freshwater and marine contributions to the fishery as well as the habitats in those environments that support the fishery. For "Fisheries and Freshwater Habitat," the Baseline Conditions include information that is not included in the "Marine Resources" Baseline Conditions. Any baseline information from the freshwater section that is applicable to marine fisheries should also be included under the marine section.	Acknowledged. The LSAs of the Fisheries and Freshwater Habitat and Marine Resource components overlap to ensure that no information regarding marine fish and marine habitat is omitted. Any Fisheries and Freshwater Habitat baseline information that is also applicable to marine fisheries will be included in the Marine Resource assessment and/or cross-referenced as appropriate.	Section 4.3.1 revised to include: <u>Proposed LSAs and RSAs are presented in Appendix A.</u> Series of study area maps have been included as Appendix A.
331		0 Fisheries and Oceans Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	DFO-016	Maps showing eelgrass beds have been removed. If eelgrass is present or in the vicinity of the proposed Project, the EIS should ensure these important marine features appear in the application.	Eelgrass beds was appropriately removed from the mapping of freshwater aquatic habitat in Section 5.1.4 and will be explicitly incorporated into the new section 5.2.4 (Marine Resource Baseline Conditions).	Section 5.2.4, bullet 4, revised as follows: - LSA and RSA habitat mapping (including eelgrass and kelp beds) will be completed as a part of <u>based on</u> field and desk-top studies.
332		0 Fisheries and Oceans Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	DFO-017	DFO interprets permanent alteration to fish habitat causing serious harm to fish as an alteration of a spatial scale, duration or intensity that limits or diminishes the ability of fish to use such habitats as spawning grounds, or as nursery, rearing, or food supply areas, or as a migration corridor, or any other area in order to carry out one or more of their life processes (The Fisheries Protection Policy Statement, 2013). Hence, an alteration does not have to be irreversible in order to cause serious harm. Please revise this text. The EIS application should identify all alterations of fish habitat in both the freshwater and marine environments	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 5.1.6 revised as follows: The EAC Application/EIS will identify mitigation measures and environmental management strategies to avoid, limit, or otherwise mitigate potential effects of the Proposed Project on fisheries and freshwater habitat VCs including <u>any permanent alteration or destruction of fish habitat causing serious harm to fish resulting from irreversible alteration, disruption or destruction of fish habitat or the direct destruction of fish.</u>
333		0 Health Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	HC-009	However, I also note the changes that have been made to Table 4 under "Air Quality" (pg. 35). I see no reason why the Proponent has made changes to the wording in this row, which should continue to read: "BC Ambient Air Quality Objectives (AAQO) and National Ambient Air Quality Objectives (NAAQO) for SO2, NO2, Dust Fall, PM10, and PM2.5, where applicable. Comparison with background and baseline conditions." Similar wording changes have also been made to dAIR/dEISG in Section 5.7.4 Baseline Conditions (pg. 81). SO2 and NO2 will be generated through the operation of on-site diesel powered equipment and barges moving to and from the site, and may cause changes to ambient air quality in the vicinity of residences near the project. Also, consideration of dust fall is not the same as total suspended particulates (TSP). TSP can be defined as a mixture of fine particles which do not settle by gravity and are therefore inhalable by humans. Thus, TSP would include PM2.5 and PM10 which are most important from a human health perspective. On the other hand, dust fall refers to larger particle sizes that are more likely to settle out by gravity on environmental media near the project site, including homes, vegetable gardens etc. For these reasons (and in agreement with BC MOE), HC advises that the full list of air quality parameters continue to be assessed for this project, and that the original wording in both Table 4 and Section 5.7.4 be retained.	The BC Ministry of Environment has indicated that the removal of dustfall from the list of indicators is "acceptable from an air quality perspective" (see MOE-EP-044) As part of the assessment, particulate deposition resulting from project operations will be quantified and provided to other technical disciplines (including Public Health) for use in their respective assessment reports. Due to the availability of power on site, combustion equipment (both mobile and stationary) associated with the Project operations will be limited. Major mining equipment such as the dredger, screens and crusher will be powered electrically. Quarried and processed material will be transferred around the Project site using a network of conveyors instead of using haul vehicles. During normal operating conditions there are expected to only be three internal combustion engine vehicles onsite, with a maximum operating time of 10-12 hours per day comprising of a pick-up truck (F150), forklift and a loader. Due to the fact that exhaust emissions will be limited at the facility, it is expected that emissions of SO2 and NO2 from the Project will be minimal and will not contribute significantly to the ambient air quality. This will be confirmed through quantification of SO2 and NO2 emissions. There is expected to be one tug movement per day to drop off and pick up a barge. Tugs will not have engines running while docked. Compared to current shipping activities in the region, the addition of one tug movement per day is considered to be minimal and will not contribute significantly to the ambient air quality. This will be confirmed through quantification of SO2 and NO2 emissions associated with Project related tug movements, and comparison to total published shipping emissions within the Lower Fraser Valley.	Table 4 revised to include: - <u>Particulate deposition resulting from project operations will be quantified to be used in the Public Health and other assessments, as needed.</u> - <u>Since Project-related exhaust emissions will be limited, it is expected that emissions of SO2 and NO2 from the Project will be minimal and will not contribute significantly to the ambient air quality. This will be confirmed through quantification of SO2 and NO2 emissions.</u>
334		0 Transport Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	TC-028	In light of the upcoming enforcement of the Navigation Protection Act (NPA), at the bottom of the list of acronyms and abbreviations on p. vi and in Table 3 on p. 25, it should read "NWPA/NPA - "Navigable Waters Protection Act / Navigation Protection Act".	Acknowledged.	Revised as requested.
335		0 Environment Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	EC-052	Revise the formatting under 5.0 Assessment of Potential Environmental Effects by replacing Surface Water Resources with Surface Water Flow and Surface Water Quality and replacing Groundwater Resources with Groundwater Flow and Groundwater Quality. This would assist in distinguishing water quality as a valued component within the document.	Acknowledged. Water quality (flow) and quality are VCs for both Surface Water and Groundwater Resource components. VCs will be renamed to clarify which components each VC is associated with.	Table 4 (Surface Water Resources) revised as follows: - <u>Surface Water quantity</u> flows - <u>Surface Water Quality</u> Table 4 (Groundwater Resources) revised as follows: - <u>Groundwater Flow</u> Regime and Groundwater Quality

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336		Environment Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	EC-053	Revise text in the second paragraph to "For the purposes of this assessment, fisheries and freshwater habitat resources..." For consistency, it is suggested that this also be reflected within the remainder of the document where this change has been missed.	Acknowledged.	Revised as requested.
337		Environment Canada	27-Mar-14	dAIR 2.3 (26Feb2014)	EC-053	"Fish and freshwater habitat requirements for the offset of impacts to CRA fisheries and associated habitat will be based on guidance from the DFO's Practitioners Guide to Habitat Compensation, as follows: ...Requirements for Environmental Effects Monitoring (EEM)..." Remove this bullet referencing the Federal EEM program given that the Metal Mining Effluent Regulations / Environmental Effects Monitoring only applies to metal mines. Subsection 2(1) of the MMR states that "These regulations apply in respect of mines and recognized closed mines". As such, any discharge from this aggregate project would be subject to subsection 36(3) of the Fisheries Act .	Acknowledged.	Sections 5.1.6 and 5.2.6 revised to remove the bullets containing "requirements for Environmental Effects Monitoring (EEM)".
338	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-022	The standalone EIS Summary document that will be posted on the Agency's official website will be posted in both official languages. The Executive Summary may not include all of the information required in the standalone EIS Summary document. The EIS Summary document provided in both official languages will need to be a standalone document.	Acknowledged	Section 15 revised to clarify that the bilingual Summary will provide a standalone summary of the EAC Application/EIS.
339	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-016.1	Comments CEAA 016 and CEAA 019 have not been adequately addressed. Comment CEAA 016: For the significance evaluation, probability (i.e., likelihood of the predicted effect occurring) will be considered with magnitude, geographic extent, duration and frequency, reversibility and context. This methodology is not consistent with the federal approach for the evaluation of significance. As outlined in the Reference Guide for the Canadian Environmental Assessment Act: Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects (Prepared by the Federal Environmental Assessment Review Office - November 1994), likelihood is considered after the significance evaluation that includes magnitude, geographic extent, duration and frequency, reversibility, and ecological context. The significance evaluation for the federal EA must be consistent with the federal guidance for the evaluation of significance to meet the requirements of the former Act. The significance methodology will need to include an evaluation that will meet the federal requirements. Likelihood is still being considered prior to the significance determination	The difference between the provincial and the federal methods is understood. The BC Guidance (BCEAO 2013) requires that criteria for characterizing residual effects and the likelihood of a potential residual adverse effect occurring be considered in determining the significance of potential adverse effects. The Federal Guidance (FEARO 1994) requires the determination of the significance of a potential adverse effect prior to characterizing the likelihood of the effect occurring. Both methods will be relected in the EAC Application/EIS.	None proposed.
340	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-019.1	Comments CEAA 016 and CEAA 019 have not been adequately addressed. Comment CEAA 016: For the significance evaluation, probability (i.e., likelihood of the predicted effect occurring) will be considered with magnitude, geographic extent, duration and frequency, reversibility and context. This methodology is not consistent with the federal approach for the evaluation of significance. As outlined in the Reference Guide for the Canadian Environmental Assessment Act: Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects (Prepared by the Federal Environmental Assessment Review Office - November 1994), likelihood is considered after the significance evaluation that includes magnitude, geographic extent, duration and frequency, reversibility, and ecological context. The significance evaluation for the federal EA must be consistent with the federal guidance for the evaluation of significance to meet the requirements of the former Act. The significance methodology will need to include an evaluation that will meet the federal requirements. Likelihood is still being considered prior to the significance determination	The difference between the provincial and the federal methods is understood. The BC Guidance (BCEAO 2013) requires that criteria for characterizing residual effects and the likelihood of a potential residual adverse effect occurring be considered in determining the significance of potential adverse effects. The Federal Guidance (FEARO 1994) requires the determination of the significance of a potential adverse effect prior to characterizing the likelihood of the effect occurring. Both methods will be relected in the EAC Application/EIS.	None proposed.
341	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-023	The proponent for the Woodfibre LNG Project is known. This information can be found on the Canadian Environmental Assessment Agency's Registry website at http://www.ceaa-acee.gc.ca/050/index-eng.cfm (Reference number 80060). Please update the table to include the proponent for the Woodfibre LNG Project.	Acknowledged.	Table 5 revised to specify Woodfibre Natural Gas Ltd.'s Woodfibre LNG Project.

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342	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-015.1	<p>Comment CEAA-015 has not been adequately addressed.</p> <p>Comment CEAA-015: Please provide a detailed description of the geographic extent of the marine shipping that will be included in the federal scope. The description of the scope for shipping must be consistent with my letter dated November 12, 2013, to BURNCO, where I confirmed the geographic extent of the marine shipping for the BURNCO project.</p> <p>It seems the scope of assessment for marine shipping does not match the scope of assessment outlined in my letter of November 12, 2013. The scope of assessment of marine shipping for the purposes of the comprehensive study will continue to include barge traffic in Howe Sound, Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel (south of Passage Island). The scope will no longer include shipping from where the barges meet the existing shipping lanes in the Strait of Georgia and in the Fraser River to BURNCO's existing facilities in Burnaby and Langley. The mouth of the Fraser seems like it is beyond the scope of assessment. One option: "The RSA includes the shipping route from the proposed Project site through Ramillies, Thornbrough and Queen Charlotte Channels in Howe Sound to beyond the mouth of the north arm of the Fraser River"</p> <p>The scope of assessment for marine shipping should be adjusted appropriately anywhere it occurs in the document</p>	<p>Acknowledged. The scope of the assessment of the marine shipping component will be clarified throughout with specific reference to CEA Agency's November 12, 2013 letter to BURNCO.</p>	<p>Section 2.2.3.3 revised as follows: Filled barges will be towed via along two proposed barging routes, navigational channels and shipping traffic lanes from the site through <u>Howe Sound via the Ramillies and / or Thornbrough Channel, to the</u> and Queen Charlotte Channel, <u>to south of Passage Island, at which point they will connect with BURNCO's existing shipping lanes in the Strait of Georgia, Howe Sound to the north arm of the Fraser River</u> (Figure 4).</p> <p>Section 2.4 revised as follows: The scope of assessment of the marine shipping component of the Proposed Project consists of the barge traffic in Howe Sound, Ramillies Channel, Thornbrough Channel, and Queen Charlotte Channel (to south of Passage Island) (Figure 4). The scope does not include shipping from where the barges meet the existing shipping lanes in the Strait of Georgia and in the Fraser River to BURNCO's existing facilities in Burnaby and Langley (CEA Agency 2013).</p> <p>Section 21 revised to include: <u>CEA Agency. 2013. Letter to Mr. Derek Holmes, BURNCO Rock Products Ltd RE BURNCO Aggregate Mine Project. Dated November 12, 2013.</u></p>
343	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-015.2	<p>Comment CEAA-015 has not been adequately addressed.</p> <p>Comment CEAA-015: Please provide a detailed description of the geographic extent of the marine shipping that will be included in the federal scope. The description of the scope for shipping must be consistent with my letter dated November 12, 2013, to BURNCO, where I confirmed the geographic extent of the marine shipping for the BURNCO project.</p> <p>It seems the scope of assessment for marine shipping does not match the scope of assessment outlined in my letter of November 12, 2013. The scope of assessment of marine shipping for the purposes of the comprehensive study will continue to include barge traffic in Howe Sound, Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel (south of Passage Island). The scope will no longer include shipping from where the barges meet the existing shipping lanes in the Strait of Georgia and in the Fraser River to BURNCO's existing facilities in Burnaby and Langley. The mouth of the Fraser seems like it is beyond the scope of assessment. One option: "The RSA includes the shipping route from the proposed Project site through Ramillies, Thornbrough and Queen Charlotte Channels in Howe Sound to beyond the mouth of the north arm of the Fraser River"</p> <p>The scope of assessment for marine shipping should be adjusted appropriately anywhere it occurs in the document</p>	<p>Acknowledged. The scope of the assessment of the marine shipping component will be clarified throughout with specific reference to CEA Agency's November 12, 2013 letter to BURNCO.</p>	<p>Section 4.3.1 revised as follows: "... shipping routes to and from the Proposed Project site through <u>Howe Sound, Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel to south of Passage Island (Figure 4). The scope of the assessment does not include shipping from where the barges meet the existing shipping lanes in the Strait of Georgia and in the Fraser River (CEAA Agency 2013).</u> to the north arm of the Fraser River (Figure 5).</p> <p>Section 21 revised to include: <u>CEA Agency. 2013. Letter to Mr. Derek Holmes, BURNCO Rock Products Ltd RE BURNCO Aggregate Mine Project. Dated November 12, 2013.</u></p>
344	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-015.3	<p>Comment CEAA-015 has not been adequately addressed.</p> <p>Comment CEAA-015: Please provide a detailed description of the geographic extent of the marine shipping that will be included in the federal scope. The description of the scope for shipping must be consistent with my letter dated November 12, 2013, to BURNCO, where I confirmed the geographic extent of the marine shipping for the BURNCO project.</p> <p>It seems the scope of assessment for marine shipping does not match the scope of assessment outlined in my letter of November 12, 2013. The scope of assessment of marine shipping for the purposes of the comprehensive study will continue to include barge traffic in Howe Sound, Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel (south of Passage Island). The scope will no longer include shipping from where the barges meet the existing shipping lanes in the Strait of Georgia and in the Fraser River to BURNCO's existing facilities in Burnaby and Langley. The mouth of the Fraser seems like it is beyond the scope of assessment. One option: "The RSA includes the shipping route from the proposed Project site through Ramillies, Thornbrough and Queen Charlotte Channels in Howe Sound to beyond the mouth of the north arm of the Fraser River"</p> <p>The scope of assessment for marine shipping should be adjusted appropriately anywhere it occurs in the document</p>	<p>Acknowledged. The scope of the assessment of the marine shipping component will be clarified throughout with specific reference to CEA Agency's November 12, 2013 letter to BURNCO.</p>	<p>Section 5.2.3.2 revised as follows: The RSA includes the shipping route from the Proposed Project site through <u>Howe Sound via Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel</u> to south of Passage Island in Howe Sound to the mouth of the north arm of the Fraser River.</p> <p>Section 5.7.3.2 and 5.8.3.2 revised as follows: The RSA will encompass the proposed shipping routes to and from the Proposed Project site through <u>Howe Sound, Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel to south of Passage Island, to the north arm of the Fraser River</u> and extend to where air quality indicators reach background levels.</p> <p>Section 21 revised to include: <u>CEA Agency. 2013. Letter to Mr. Derek Holmes, BURNCO Rock Products Ltd RE BURNCO Aggregate Mine Project. Dated November 12, 2013.</u></p>

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345	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-015.4	<p>Comment CEAA-015 has not been adequately addressed.</p> <p>Comment CEAA-015: Please provide a detailed description of the geographic extent of the marine shipping that will be included in the federal scope. The description of the scope for shipping must be consistent with my letter dated November 12, 2013, to BURNCO, where I confirmed the geographic extent of the marine shipping for the BURNCO project.</p> <p>It seems the scope of assessment for marine shipping does not match the scope of assessment outlined in my letter of November 12, 2013. The scope of assessment of marine shipping for the purposes of the comprehensive study will continue to include barge traffic in Howe Sound, Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel (south of Passage Island). The scope will no longer include shipping from where the barges meet the existing shipping lanes in the Strait of Georgia and in the Fraser River to BURNCO's existing facilities in Burnaby and Langley. The mouth of the Fraser seems like it is beyond the scope of assessment. One option: "The RSA includes the shipping route from the proposed Project site through Ramillies, Thornbrough and Queen Charlotte Channels in Howe Sound to beyond the mouth of the north arm of the Fraser River"</p> <p>The scope of assessment for marine shipping should be adjusted appropriately anywhere it occurs in the document</p>	Acknowledged. The scope of the assessment of the marine shipping component will be clarified throughout with specific reference to CEA Agency's November 12, 2013 letter to BURNCO.	<p>Section 7.2.3.2 revised as follows: The marine RSA includes the shipping route from the Proposed Project site through <u>Howe Sound, Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel to south of Passage Island in Howe Sound and through to the north arm of the Fraser River.</u></p> <p>Section 21 revised to include: <u>CEA Agency, 2013. Letter to Mr. Derek Holmes, BURNCO Rock Products Ltd RE BURNCO Aggregate Mine Project. Dated November 12, 2013.</u></p>
346	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-009.1	<p>Water Quality has been added under Section 5.5.5 (Determine Potential Effects) in response to my comment (CEAA-009) on addressing water quality under surface water resources; however, water quality is not addressed under the Baseline Conditions section. Appropriate information with respect to water quality should be included in Section 5.5.4</p>	Section 5.5.4 has been revised to specifically include water quality.	Section 5.5.4 revised as follows: <u>- Assessment of water quality of freshwater (surface water and groundwater) environments to characterize baseline conditions. Assessment of aquatic resources within the RSA will be conducted through a literature review.</u>
347	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-024	<p>Provide a reference for the "federal discharge requirements." It is not clear where these requirements have been sourced or what the requirements entail.</p>	There are no anticipated discharges from the Proposed Project. This reference can be removed with the deletion of references to the federal EEM program (Ref EC-0053).	<p>Section 5.6.3 revised as follows: Identify provincial and federal discharge requirements and Evaluate potential effects of the Proposed Project on hydrogeology conditions, the groundwater regime, and groundwater quality.</p> <p>Section 5.6.5 revised as follows: The assessment will use federal discharge requirements and evaluate potential effects of the Proposed Project on hydrogeology conditions, the groundwater regime, and groundwater quality.</p>
348	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-025	<p>Public Comment 1625 from the dAIR public comment period related to this sentence of the dAIR/dEISg. BURNCO's response to this comment is as follows: Sentence will be revised as baseline measurements were conducted in 2012 and 2013. Receptor locations and baseline measurement results will be included in the EAC Application/EIS.</p> <p>This sentence has not been revised. Please revise this sentence according to BURNCO's response to comment 1625</p>	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 9.2.4 revised as follows: Baseline noise information will be obtained via field measurements conducted in summer and fall 2012 and 2013.
349	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-017.1	<p>Comment CEAA-017 has not been adequately addressed.</p> <p>Comment CEAA-017: Include a list of the potentially affected Aboriginal groups identified by the Agency. This list is included in my letter dated November 12, 2013.</p> <p>BURNCO's response to this comment states that the "EAC Application / EIS will identify potentially affected Aboriginal groups in the BCEAO Section 11 Order or as otherwise identified by the Agency, including the following list..."</p> <p>These groups must be identified in the AIR/EISg. I recommend these groups be identified in Part C of the AIR/EISg. Please note that the list provided in BURNCO's response to comment CEAA-017 is missing the Squamish Nation.</p>	<p>Section 10 revised to specify Aboriginal groups.</p> <p>Proponent response to CEAA-017 corrected to include Squamish Nation.</p>	Section 10 revised as follows: <u>These Aboriginal groups include:</u> <ul style="list-style-type: none"> - Squamish Nation - Musqueam Indian Band; - Tsleil-Waututh Nation; - St'uminus First Nation; - Cowichan Tribes; - Halalt First Nation; - Lake Cowichan First Nation; - Lyackson First Nation; - Penelakut Tribe; and - Métis Nation British Columbia.

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350	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-026	<p>According to the Agency's letter dated November 12, 2013, to Derek Holmes regarding the BURNCO Project, the EIS must include a description of the current use of lands and resources for traditional purposes by each identified group, as well as a description of the potential effects of changes to the environment resulting from the Project on these uses. Once this information has been prepared, BURNCO must provide each group with an opportunity to review the information, and include a summary of any comments provided by these groups in the EIS.</p> <p>This requirement must be reflected in Section 13.0 of the AIR/EISg</p>	Acknowledged. AIR/EIS Guidelines revised as requested.	<p>Section 13 revised as follows:</p> <ul style="list-style-type: none"> - Consider both federal and provincial consultation requirements, <u>including CEA Agency's requirements for the Proponent to:</u> <ul style="list-style-type: none"> - Describe current uses of lands and resources for traditional purposes for each Aboriginal groups identified in Section 10.0, as well as potential effects of changes to the environment resulting from the Proposed Project on these uses; - Provide each Aboriginal group identified in Section 10.0 with an opportunity to review this information; and - Summarize comments received from the Aboriginal groups identified in Section 10.0 in response to the information provided.
351	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-021.1	<p>The information required under Section 16 of the former Act is mostly included as a bulleted item in this section, with the exception of the need for, and the requirements of, any follow-up program in respect of the project. My previous comment CEAA-021 noted this Section should address all requirements of Section 16 of the former Act.</p> <p>This requirement (Section 16(2)c) of the former Act should receive its own bullet in this section.</p>	Acknowledged. Part E is designed to address requirements of any follow-up program in respect of the Proposed Project. Section 15 will be revised to explicitly also include this additional factor to be considered.	<p>Section 15 revised to include:</p> <ul style="list-style-type: none"> - <u>Follow-Up Program – The EAC Application/EIS will describe the need for, and the requirements of any follow-up program in respect of the Proposed Project. The EAC Application/EIS will make references to other sections of the EAC Application/EIS where appropriate to reduce redundancy.</u>
352	Inouye, Kevin	Canadian Environmental Assessment Agency	27-Mar-14	dAIR 2.3 (26Feb2014)	CEAA-027	<p>A number of comments from the EAO's dAIR public comment period discussed concerns with glass sponges. Glass sponges should be addressed in this document.</p> <p>Under the "Marine Benthic Communities" VC in Table 4, add "Accidents and malfunctions could result in the loss of barge materials, and barges and tugs. This could result in the release of toxic substances, all of which could impact marine benthic communities, including glass sponges."</p> <p>Add "marine benthic communities" under Accidents and Malfunctions on page 119 as follows: Identify potential accidents, malfunctions, and unplanned events that could occur in any phase of the Proposed Project, the likelihood and circumstances under which these events could occur and the environmental effects that may result from such events, including impacts to marine benthic communities, assuming contingency plans are not fully effective.</p>	Acknowledged. AIR/EIS Guidelines revised as requested.	<p>Table 4 (Marine Benthic Communities) revised to include:</p> <ul style="list-style-type: none"> - <u>Accidents and malfunctions could result in the loss of barge materials, and barges and tugs. This could result in the release of toxic substances, all of which could impact marine benthic communities, including glass sponges.</u> <p>Section 15 (Accidents and Malfunctions) revised as follows:</p> <ul style="list-style-type: none"> - Identify potential accidents, malfunctions, and unplanned events that could occur in any phase of the Proposed Project, the likelihood and circumstances under which these events could occur and the environmental effects that may result from such events, <u>including impacts to marine benthic communities</u>, assuming contingency plans are not fully effective.
353	Rafael, David	Sunshine Coast Regional District	28-Mar-14	dAIR 2.3 (26Feb2014)	SCRD-001.1	<p>Ref SCR-001</p> <p>The addition of specific reference to forage fish and their habitat is welcomed. However the removal of reference to eelgrass is a concern. Staff will follow up with the EAO and proponent as to why this change was made and request that reference to eelgrass be reinstated. The relocation of marine mammals to the Baseline Conditions section and their continued presence as a Valued Component should allow for meaningful information to be provided for review during the next phase of the EA.</p>	Eelgrass beds was appropriately removed from the mapping of freshwater aquatic habitat in Section 5.1.4 and will be explicitly incorporated into the new section 5.2.4 (Marine Resource Baseline Conditions).	<p>Section 5.2.4, bullet 4, revised as follows:</p> <ul style="list-style-type: none"> - LSA and RSA habitat mapping (<u>including eelgrass and kelp beds</u>) will be completed as a part of <u>based on</u> field and desk-top studies.
354	Rafael, David	Sunshine Coast Regional District	28-Mar-14	dAIR 2.3 (26Feb2014)	SCRD-002.1	<p>Ref SCR-002</p> <p>The draft AIR includes references to cumulative effects in relation to possible impact on each Valued Component and an integration of the cumulative effects sections. The addition of — detailed baseline condition studies for the foreshore are welcomed as this will assist in identifying the potential to target environmental improvements/mitigation to the foreshore area if required. Staff will examine the information provided in the next phase of the EA to gain an understanding of the issues regarding the foreshore and potential for improvements.</p>	The potential effects of the project (including loading and barging) on local and regional study areas within Howe Sound will be assessed. The current state of Howe Sound will be reflected in the baseline conditions against which potential effects will be assessed. The purpose of the EA is to predict the significance of potential project-related effects - environmental, economic, social, heritage and health - and to identify measures to avoid or reduce these potential effects through redesign and operational improvements.	None proposed.
355	Rafael, David	Sunshine Coast Regional District	28-Mar-14	dAIR 2.3 (26Feb2014)	SCRD-003.1	<p>Ref SCR-003</p> <p>The amended AIR sets out a range of information requirements regarding tourism and recreation. Staff will review this information during the next phase of the EA as this is an important aspect of the Howe Sound area's economy that has benefited from the Sound's environmental recovery.</p>	Acknowledged. An assessment of potential effects on recreation and tourism will be provided in the EAC Application/EIS.	None proposed.

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356	Rafael, David	Sunshine Coast Regional District	28-Mar-14	dAIR 2.3 (26Feb2014)	SCRD-004.1	Ref SCR-004 This information and the measure proposed will be the subject of review during the next phase of the EA.	Acknowledged.	None proposed.
357	Rafael, David	Sunshine Coast Regional District	28-Mar-14	dAIR 2.3 (26Feb2014)	SCRD-005.1	Ref SCR-005 Potential impact on the ongoing recovery of Howe Sound is an important issue for the SCR and other groups such as the Future of Howe Sound Society.	It is acknowledged that historical industrial activities have impacted Howe Sound and that the ecological health of the area has been improving. The current state of Howe Sound will be reflected in the baseline conditions against which potential effects will be assessed. The purpose of the EA is to predict the significance of potential project-related effects - environmental, economic, social, heritage and health - and to identify measures to avoid or reduce these potential effects through redesign and operational improvements.	None proposed.
358	Rafael, David	Sunshine Coast Regional District	28-Mar-14	dAIR 2.3 (26Feb2014)	SCRD-006.1	Ref SCR-006 The draft AIR and amended AIR include several references to identifying mitigation measures in the context of addressing any potential environmental impacts. Mitigation is also set out as an issue to be addressed with regard to economic development in the region and property values. Potential social effects, such as visual impact will also be considered. During the next phase of the EA, staff will look for any proposals that will contribute towards economic improvements especially in relation to tourism and recreational values.	Acknowledged. An assessment of potential effects on recreation and tourism will be provided in the EAC Application/EIS.	None proposed.
359	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-049.1	<u>Lack of consideration of Squamish values in VC development</u> Squamish Nation has identified a number of species of importance for various reasons, including biodiversity and ecosystem functioning and indicated that they should be included as Valued Components ("VC"). The latest draft AIR/EISg fails to include these as VCs. In section 4.2, "Selected Valued Components", the Proponent identifies that VCs are, in part, selected based on their importance to Aboriginal groups, and on issues raised by Aboriginal groups. This is not the case with the Squamish Nation, as our recommendations that freshwater benthic communities, moose, deer, elk, black bear, raptors (including Great Blue Heron, Bald Eagle, Osprey), northern abalone and traditional use and medicinal plants be included as VCs have not been adopted. Instead, the draft AIR/EISg proposes to identify wildlife species to be considered for assessment through consultation with interested Aboriginal groups in Part C of the Application for an environmental assessment certificate/Environmental Impact Statement ("Application"). The species of concern that we have identified to date should be assessed as VCs through the main environmental impact assessment for the Project to ensure a rigorous assessment of impacts on these species and allow for the development of appropriate mitigation measures. At a bare minimum, the rationale for excluding what Squamish Nation views to be key species as VCs, should be required by the AIR/EISg (Comments SN-015; SN-017; SN-018, SN-019; SN-020). Given Squamish Nation rights and interests are integrally connected to environmental values, and cannot be effectively addressed without Squamish involvement in determining the scope of the EA, the exclusion of these key species from the VC analysis calls into question the extent to which the Application will effectively assess Project impacts on Squamish rights and interests (Comment SN-032).	AIR/EIS Guidelines revised to incorporate a discussion of VCs suggested by Aboriginal groups and rationale for their exclusion of as selected VCs, where appropriate. This discussion and the corresponding rationales will be carried forward to the EAC Application/EIS.	Section 4.2 revised to include: <u>Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided.</u> Table 4 revised to include the following in relation to Marine Resources VC Marine Benthic Communities (flora and fauna): <u>- Although suggested by Aboriginal groups as a candidate VC, Northern abalone has not been included as selected VC since it has not been identified as a species that may potentially occur within the Proposed Project area and there are no known occurrences of Northern abalone at the site. The conclusion that there are no known occurrences is based on a desktop review (SARA Registry, BC Conservation Data Centre) and a review of habitat suitability. These results were calibrated based on dive and underwater camera video survey observations</u> <u>-Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided in the EAC Application/EIS.</u>

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360	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-049.2	<p><u>Lack of consideration of Squamish values in VC development</u> Squamish Nation has identified a number of species of importance for various reasons, including biodiversity and ecosystem functioning and indicated that they should be included as Valued Components ("VC"). The latest draft AIR/EISg fails to include these as VCs.</p> <p>In section 4.2, "Selected Valued Components", the Proponent identifies that VCs are, in part, selected based on their importance to Aboriginal groups, and on issues raised by Aboriginal groups. This is not the case with the Squamish Nation, as our recommendations that freshwater benthic communities, moose, deer, elk, black bear, raptors (including Great Blue Heron, Bald Eagle, Osprey), northern abalone and traditional use and medicinal plants be included as VCs have not been adopted. Instead, the draft AIR/EISg proposes to identify wildlife species to be considered for assessment through consultation with interested Aboriginal groups in Part C of the Application for an environmental assessment certificate/Environmental Impact Statement ("Application"). The species of concern that we have identified to date should be assessed as VCs through the main environmental impact assessment for the Project to ensure a rigorous assessment of impacts on these species and allow for the development of appropriate mitigation measures. At a bare minimum, the rationale for excluding what Squamish Nation views to be key species as VCs, should be required by the AIR/EISg (Comments SN-015; SN-017; SN-018, SN-019; SN-020).</p> <p>Given Squamish Nation rights and interests are integrally connected to environmental values, and cannot be effectively addressed without Squamish involvement in determining the scope of the EA, the exclusion of these key species from the VC analysis calls into question the extent to which the Application will effectively assess Project impacts on Squamish rights and interests (Comment SN-032).</p>	<p>AIR/EIS Guidelines revised to incorporate a discussion of VCs suggested by Aboriginal groups and rationale for their exclusion of as selected VCs, where appropriate. This discussion and the corresponding rationales will be carried forward to the EAC Application/EIS.</p>	<p>Table 4 revised to include the following in relation to Terrestrial Wildlife and Vegetation VCs: - <u>Some species suggested by Aboriginal groups as candidate VCs have not been included as selected VCs (e.g., Barn swallow; Great blue heron, other raptor species and their nests; and moose, deer and black bear). In each case, selected VCs were chosen because they are particularly vulnerable or represent a biological niche that is representative of other species. For example, Common nighthawk was selected as a representative insectivorous bird species. Notwithstanding, all species at-risk identified for the Proposed Project area will be discussed in the EAC Application/EIS, with a more detailed level of analysis being provided for selected VCs which may be representative of other species.</u> - <u>Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided in the EAC Application/EIS.</u></p>
361	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-049.3	<p><u>Lack of consideration of Squamish values in VC development</u> Squamish Nation has identified a number of species of importance for various reasons, including biodiversity and ecosystem functioning and indicated that they should be included as Valued Components ("VC"). The latest draft AIR/EISg fails to include these as VCs.</p> <p>In section 4.2, "Selected Valued Components", the Proponent identifies that VCs are, in part, selected based on their importance to Aboriginal groups, and on issues raised by Aboriginal groups. This is not the case with the Squamish Nation, as our recommendations that freshwater benthic communities, moose, deer, elk, black bear, raptors (including Great Blue Heron, Bald Eagle, Osprey), northern abalone and traditional use and medicinal plants be included as VCs have not been adopted. Instead, the draft AIR/EISg proposes to identify wildlife species to be considered for assessment through consultation with interested Aboriginal groups in Part C of the Application for an environmental assessment certificate/Environmental Impact Statement ("Application"). The species of concern that we have identified to date should be assessed as VCs through the main environmental impact assessment for the Project to ensure a rigorous assessment of impacts on these species and allow for the development of appropriate mitigation measures. At a bare minimum, the rationale for excluding what Squamish Nation views to be key species as VCs, should be required by the AIR/EISg (Comments SN-015; SN-017; SN-018, SN-019; SN-020).</p> <p>Given Squamish Nation rights and interests are integrally connected to environmental values, and cannot be effectively addressed without Squamish involvement in determining the scope of the EA, the exclusion of these key species from the VC analysis calls into question the extent to which the Application will effectively assess Project impacts on Squamish rights and interests (Comment SN-032).</p>	<p>In relation to traditional use and medicinal plants, BURNCO has supported a Squamish Nation-led study that is intended to identify Squamish Nation interests in the project area and potential adverse project effects to those interests. To date, the study has not been completed or shared with the proponent. Final VC selection will include species and communities of importance to First Nations that are not otherwise identified, where this information is made available through consultation. Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided in the EAC Application/EIS.</p> <p>Section 5.3.5 include a provision to consider traditional ecological or community knowledge, where available, in the assessment of potential effects on terrestrial wildlife and vegetation.</p>	<p>None proposed.</p>

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362	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-014.2	<p><u>Inadequate assessment of effects on freshwater fish habitat</u></p> <p>The scope of assessment for Project effects on fish habitat is inadequate. A full assessment of baseline conditions on freshwater fish habitat is necessary, which should include an assessment of freshwater benthic communities (flora and fauna) by adding this as a VC. This is essential to a fulsome EA, given the importance of McNab Creek and the importance of baseline data (e.g. on freshwater benthic communities) to the assessment of Project effects on freshwater fish habitat (Comment SN-014).</p>	<p>AIR/EIS Guidelines revised to incorporate a discussion of VCs suggested by Aboriginal groups and rationale for their exclusion of as selected VCs, where appropriate. This discussion and the corresponding rationales will be carried forward to the EAC Application/EIS.</p> <p>Aquatic Health is also being assessed as a VC under Surface Water Resources. Ref. BCEAO-017 and CEAA-036. Appendix A of Rev 3.1 (03Dec2014) revised to contain "Preliminary Valued Component and Study Area Rationale".</p>	<p>Table 4 revised to include the following in relation to Fisheries and Freshwater Habitat VCs:</p> <p>- <u>Although suggested by Aboriginal groups as a candidate VC, freshwater benthic communities have not been included as selected VC since freshwater productivity is being measured using water quality (including nutrients and chlorophyll), fish distribution and habitat use. Aquatic health is also being assessed as a VC under Surface Water Resources. Attention to higher trophic level VCs (salmonids), supplemented with water quality monitoring is expected to be adequate to assess the anticipated impacts of the Proposed Project. Freshwater benthic samples have been collected as the basis for aquatic health assessment and monitoring during project construction and operations since the use of benthic invertebrates and periphyton can provide meaningful indices for monitoring change in aquatic environments.</u>(NOTE: bold added for Rev 3.1 (03 Dec2014))</p> <p>- <u>Rationale for excluding candidate VCs from the list of selected VCs will be provided in the EAC Application/EIS.</u></p> <p>Table 4 of Rev 3.1 (03Dec2014) revised to include the following under Surface Water Resources:</p> <p>VC - <u>Aquatic Health</u></p> <p>Supporting Rationale - <u>Changes in TSS / TDS and chemical quality may impact:</u></p> <p>- <u>Periphyton – food source for invertebrates and fish;</u></p> <p>- <u>Benthic invertebrates – link to food chain between periphyton and fish; also food source for fish and birds; and</u></p> <p>- <u>Fish – top predator in freshwater food web.</u></p>
363	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-040.2	<p><u>Inadequate assessment of economic and social effects</u></p> <p>Given the reality that First Nations generally experience a greater socio-economic burden than benefit from industrial development in comparison to settler communities the AIR/EISg must ensure there is an adequate framework for assessing the socio- economic impacts of the Project on the Squamish Nation and its members by disaggregating this analysis from the general socio-economic analysis in Part B of the Application. The AIR/EISg should require a separate analysis in Part B, sections 6.0 (Assessment of Potential Economic Effects) and 7.0 (Assessment of Potential Social Effects) specific to socio-economic impacts on the Squamish Nation, and other affected First Nations, rather than including this analysis in Part C of the Application. This is because it has been Squamish Nation's experience that the analysis in Part C is not as fulsome as the 'non-aboriginal' sections of the Application (Comment SN-040).</p>	<p>In accordance with prevailing provincial guidance, First Nations economic and social information and interests relative to potential project effects and benefits will be assessed separately in Part C, First Nations Information Requirements. Based on discussions with Squamish Nation, BURNCO understands that it is the Squamish Nation's preference to provide the information needed to support Part C; BURNCO will work with Squamish Nation to enable the preparation of a fulsome assessment, as well as to identify potential benefits. BURNCO will provide a draft of Part C and other relevant sections of the EAC Application/EIS to First Nations for review and comment in advance of submission of the final EAC Application/EIS to the EAO and CEAA Agency.</p>	<p>None proposed.</p>
364	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-029.2	<p><u>Limitations of Proponent's assessment should be identified</u></p> <p>The limitations associated with the various approaches taken by the Proponent to data collection and impact assessment should be described in their Application and the AIR/EISg should be amended to ensure this occurs. For example, the limitations of using Vegetation Resource Inventory data for habitat modeling in the Regional Study Area must be outlined in the Application (see Comment SN-029; draft AIR/EISg Rev. 2.3, at s. 5.3.3.3).</p>	<p>Acknowledged. Section 4.5.3 of the AIR/EIS Guidelines require that potential project-related residual effects be characterized as the basis for determining the significance of potential residual adverse effects for each VC. The level of confidence for each predicted effect will be discussed to characterize the level of uncertainty associated with both the significance and likelihood determinations. The sources and nature of uncertainty associated with residual effect predictions will be described to provide the basis for the stated level of confidence.</p>	<p>Section 4.5.3 clarified as follows:</p> <p>Potential project-related residual effects will be characterized as the basis for determining the significance of potential residual adverse effects for each VC. The level of confidence for each predicted effect will be discussed to characterize the level of uncertainty associated with both the significance and likelihood determinations. The sources and nature of uncertainty associated with residual effect predictions, including limitations of data collection and impact assessment methodologies, will be described to provide the basis for the stated level of confidence.</p>
365	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-018.1	<p>On a similar vein, we note that the draft AIR/EISg does not indicate how coastal tailed frog will be assessed (coastal tailed frog is not included in the amphibian surveys or habitat suitability modelling, or inventory methods outlined in draft AIR/EISg s. 5.3.3.3). Squamish Nation requests that how coastal tailed frog is it to be assessed is set out in the AIR/EISg (Comment SN-018).</p>	<p>Surveys were conducted to assess potential amphibian breeding habitat, including coastal tailed frog, within the Project Area. There was no suitable coastal tailed frog breeding habitat observed within the Project Area. Subsequent amphibian surveys focused on species which may breed within the Project Area following Inventory Methods for Pond-breeding Amphibians and Painted Turtle, Version 2.0 (RIC 1998a).</p> <p>The Squamish Nation had previously stated (SN-018) that coastal tailed frog was known to occur in Harlequin Creek. While there may be more suitable habitat upstream, there was no suitable coastal tailed frog breeding habitat observed in the area of Harlequin Creek that may interact with Project-related activities. Therefore, no further study specifically related to coastal tailed frog was determined to be required.</p>	<p>Section 5.3.3 references "Inventory Methods for Pond-breeding Amphibians and Painted Turtle, Version 2.0 (RIC 1998a); Section 5.3.4, states that breeding surveys for pond-breeding amphibians were conducted following RISC guidelines and that general transects were conducted around identified breeding ponds to document adult amphibians. No further revisions are proposed.</p>

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366	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-050	<p><u>Inadequate consideration of Squamish Nation traditional land use (TLU), and Aboriginal rights</u></p> <p>While the Proponent has committed to funding a Project-specific traditional use study (TUS) no information is provided in the draft AIR/EISg as to how this information will be considered in the Application. We request that the Proponent's commitment to conduct a TUS be set out in the AIR/EISg, and that the Proponent be further required to include information from the TUS in the assessment of the proposed Project's impacts on Squamish's rights in the Application (Comment SN-046, SN-047).</p> <p>While the Proponent has committed to providing opportunities to work jointly with First Nations to identify potential residual effects on Aboriginal rights and interests, the AIR/EISg should require the Proponent to jointly develop summaries of the impacts of the proposed Project on Squamish Nation rights (including title) and interests, or to identify where in the Application Squamish Nation does not agree with the characterization of Project impacts on Squamish Nation's rights and interests (Comment SN-045).</p>	<p>Acknowledged. Section 11 of the AIR/EIS Guidelines requires the EAC Application/EIS to provide a non-confidential summary of past, present, and anticipated future uses of lands and resources in the Proposed Project area by Aboriginal groups including but not limited to current use of lands and resources for traditional purposes. BURNCO has supported a Squamish Nation-led study that is intended to identify Squamish Nation interests in the project area and potential adverse project effects to those interests. The effects assessment will consider traditional ecological or community knowledge, where available.</p>	<p>Section 13 revised as follows:</p> <ul style="list-style-type: none"> - Consider both federal and provincial consultation requirements, including CEA Agency's requirements for the Proponent to: <ul style="list-style-type: none"> - Describe current uses of lands and resources for traditional purposes for each Aboriginal groups identified in Section 10.0, as well as potential effects of changes to the environment resulting from the Proposed Project on these uses; - Provide each Aboriginal group identified in Section 10.0 with an opportunity to review this information; and - Summarize comments received from the Aboriginal groups identified in Section 10.0 in response to the information provided.
367	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-051	<p><u>Lack of integration of Squamish Nation interests and perspectives</u></p> <p>In response to some of our comments the Proponent has committed to providing opportunities to "work jointly with applicable First Nations" to identify potential residual Project effects on our rights and interests, describe Squamish Nation's involvement in the EA, and "to the extent possible" jointly develop a summary of consultation. The AIR/EISg should explicitly require the Proponent to identify the extent to which information regarding Squamish Nation's interests in the Application has been jointly developed with the Squamish Nation in sections 3.2 (Aboriginal Information Distribution and Consultation) and 9.2.7 (Residual and Cumulative Effects Assessment, and Part C) of the AIR/EISg. In the alternative, the AIR/EISg should require that the Proponent set out what information regarding our rights and interests, involvement in the EA and consultation, Squamish Nation agrees or disagrees with (Comment SN-027; SN-032; SN-045).</p>	<p>Section 3.2 of the AIR/EIS Guidelines requires the development of a summary of consultation activities undertaken, including key issues identified and the degree to which Aboriginal groups' issues are considered resolved and/or addressed by the Proponent.</p> <p>Summaries of potential residual effects of the Proposed Project on First Nations rights and interests will be presented in Section 11. First Nations will be provided the applicable summaries in draft for review and comment in advance of submission of the final EAC Application/EIS to the EAO and CEA Agency. It is BURNCO's intention that any disagreements regarding the summaries of potential residual effects will be resolved prior to finalization. Outstanding issues will be clearly identified.</p> <p>Similarly, Section 13 of the AIR/EIS Guidelines will require BURNCO to describe current uses of lands and resources for traditional purposes, as well as potential effects of changes to the environment resulting from the Proposed Project on these uses. Squamish Nation will be provided an opportunity to review this information. Comments received from the Aboriginal groups in response to the information provided will be summarized and presented in the EAC Application/EIS.</p> <p>BURNCO has supported a Squamish Nation-led study that is intended to identify Squamish Nation interests in the project area and potential adverse project effects to those interests. The effects assessment will consider traditional ecological or community knowledge, where available.</p>	<p>Section 13 revised as follows:</p> <ul style="list-style-type: none"> - Consider both federal and provincial consultation requirements, including CEA Agency's requirements for the Proponent to: <ul style="list-style-type: none"> - Describe current uses of lands and resources for traditional purposes for each Aboriginal groups identified in Section 10.0, as well as potential effects of changes to the environment resulting from the Proposed Project on these uses; - Provide each Aboriginal group identified in Section 10.0 with an opportunity to review this information; and - Summarize comments received from the Aboriginal groups identified in Section 10.0 in response to the information provided.
368	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-048.2	<p><u>Cumulative effects remain a critical concern</u></p> <p>The revised draft AIR/EISg does not address Squamish Nation's concerns with respect to a cumulative effects assessment. Existing guidance and policy on the assessment of cumulative effects will not result in adequate characterization of the erosion of Valued Components resulting from historic Crown decisions authorizing development in Squamish territory, coupled with planned future development decisions. Such decisions have already resulted in significant adverse effects to Squamish Nation lands and waters and to valued species, including marine mammals, salmon and many others.</p> <p>A cumulative effects assessment must take place either through a stand-alone section of the Proponent's Application, or outside the existing provincial and federal EA framework (Comment SN-048).</p>	<p>The EAC Application/EIS will consider cumulative effects for each VC that is determined to have a project-related residual effect. AIR/EIS Guidelines revised to reference the CEA Agency's Operational Policy Statement related to addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act, in addition to associated guidance documents.</p>	<p>Section 4.5.4 revised as follows:</p> <p>The following policy statements and guidance documents, guidelines and standards will be used:</p> <ul style="list-style-type: none"> - <u>Operational Policy Statement: Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act (CEA Agency 2007);</u> - Addressing Cumulative Environmental Effects. A Reference Guide for the Canadian Environmental Assessment Act. (CEA Agency 1994); - Cumulative Effects Practitioners Guide (CEA Agency 1999); - Guideline for the Selection of Valued Components and Assessment of Potential Effects (BCEAO 2013). <p>CEA Agency 2007 added to Section 21 References.</p>
369	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-052	<p>Further, the use of "context" as a factor to analyze residual effects of the proposed Project (AIR/EISg RV 2.3 at s. 4.5.3) is insufficient as it provides far too much discretion to the Proponent in gathering baseline data essential to the residual effects assessment. The decision of what constitutes appropriate "context" should not be left to the Proponent as it is far too vague and imprecise an information requirement to ensure Squamish Nation's concerns with respect to cumulative effects are addressed.</p>	<p>Context is considered one of the most critical factors when evaluating the importance of residual effects and refers primarily to the current and future sensitivity and resilience of the VC to project-related changes (BCEAO 2013). Other criteria considered in characterizing residual effects are magnitude, extent, duration, reversibility and frequency of potential effects.</p> <p>Golder Associates is an independent professional engineering and environmental services firm that BURNCO has selected to conduct the required studies and prepare the EAC Application/EIS for the proposed project. Selected components of the EAC Application/EIS will subject to third party review which will be documented in the submission. A Technical Working Group consisting of federal, provincial and local government agencies and First Nations has been established to review the Proposed Project.</p>	<p>None proposed.</p>

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370	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-053	Failure to ensure proper "capture" of Proponent's commitments Squamish Nation is concerned that commitments made by the Proponent to develop and implement Construction and Operation Environmental Management Programs and implement monitoring and follow-up programs will not be fleshed out early enough in the EA process or will be vaguely framed in the Application and therefore difficult to enforce. Squamish Nation requests that all commitments made by the Proponent in the Application are framed in an implementable and verifiable way that allows the Crown to ensure the terms and conditions are included in an EA decision. The AIR/EISg should be amended to make such framing a requirement (Comment SN-042, SN-044).	Section 17 includes requirements to outline a monitoring and reporting structure that will be adopted to verify the accuracy of the EA and to monitor the implementation of the effectiveness of proposed mitigation. Section 4.5.2 includes provisions to describe practical measures proposed to mitigate to an acceptable level potential adverse environmental, economic, social, heritage or health effects of the proposed Project on selected VCs. Descriptions of proposed mitigation measures in the EAC Application/EIS will include: - their suitability for project- and site-specific application; - their technical and economic feasibility; and - the extent to which their effectiveness can be measured and verified, including linkages to the Environmental Monitoring and Follow-up Program where appropriate.	Section 4.5.2 revised as follows: Descriptions of proposed mitigation will demonstrate the technical and economic feasibility of the measures, including their suitability for project- and site-specific application, if necessary. <u>Linkages will be made to the Environmental Monitoring and Follow-up Program presented in Section 17.0 where appropriate to monitor and verify the effectiveness of the measure proposed to mitigate potential environmental effects.</u> The level of detail provided will be commensurate with the risk associated with the potential effect being mitigated, and the degree to which the proposed mitigation has been proven effective in the same or similar applications elsewhere. Any uncertainty associated with the effectiveness of proposed mitigation measures will be described.
371	Chief Bill Williams	Squamish Nation	28-Mar-14	dAIR 2.3 (26Feb2014)	SN-054	Insufficient environmental monitoring and follow-up requirements Robust, implementable and fully funded monitoring and follow-up programs are essential to ensure mitigation measures are implemented and effective. Squamish Nation has requested that a monitoring and follow-up program is included as part of an environmental assessment certificate, if issued, or that Squamish implement and conduct a Proponent funded monitoring and follow-up program for the life of the Project and beyond as necessary to monitor residual effects. The current requirements in section 17, "Environmental Monitoring and Follow-up Programs", of the draft AIR/EISg are insufficient to ensure an effective program is proposed in the Application and make no mention of reporting requirements, duration of the program, or how it will be funded. It should not be left entirely to the discretion of the Proponent to develop this essential program. The draft AIR/EISg should be amended to include more explicit requirements with respect to this key aspect of the Project (Comment SN-02).	Section 17 includes requirements to outline a monitoring and reporting structure that will be adopted to verify the accuracy of the EA and to monitor the implementation of the effectiveness of proposed mitigation. This section will be revised to describe requirements to define funding responsibilities and potential opportunities for the involvement of Aboriginal groups in the development and implementation of a follow-up and monitoring program.	Section 17 revised as follows: The EAC Application/EIS will include the following information regarding follow-up programs: - Monitoring objectives; - Main program components, specific monitoring activities and schedule (<u>including duration</u>); and - Effectiveness assessment, including adaptive management, of measures proposed to mitigate potential environmental effects; - <u>Potential opportunities for the involvement of Aboriginal groups in the development and implementation of a follow-up and monitoring program;</u> and - <u>Funding responsibilities.</u>
372	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-016	1. In Purpose of the AIR/EIS Guidelines (pg. ii), please clarify why the BCEAO has deleted the following section (from paragraph 2): "The Draft AIR/EIS Guidelines are submitted to the BCEAO and the CEA Agency for review and consultation with Aboriginal groups, governmental agencies and the public. The Proponent is responsible for responding to the comments received and revising the AIR/EIS Guidelines, as appropriate. Revised Draft AIR/EIS Guidelines are submitted to the BCEAO and the CEA Agency for final review and approval."	This section was removed following completion of the public and TWG comment periods since it refers to activities that had already occurred and were not material to the Purpose of the AIR/EIS Guidelines . The chronology of submission and review of iterative drafts of the AIR/EIS Guidelines are presented in the previous section entitled Version Control .	None proposed.
373	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-017	2. In Section 2.4 (pg. 21), we request that the Strait of Georgia and Fraser River shipping routes be included in the scope of the proposed project, including existing routes and increases planned in the near future.	BURNCO's BC operations currently transport sand and gravel by barge from Treat Creek (northwest of Powell River), and as far away as Port McNeil on northern Vancouver Island, to existing facilities along the Fraser River in Burnaby and Langley. The development of the proposed Project would replace the need to transport aggregate from these sites. Instead, BURNCO would tow aggregate-filled barges (on average, one barge every two days) from the marine loading facility in Howe Sound through Queen Charlotte Channel to the Fraser River via both Thornbrough Channel (regular route) and Ramillies Channel (bad weather route). Beyond this point, Project-related shipping would fully replace existing barge traffic currently associated with existing BURNCO facilities, resulting in no change in BURNCO's contribution to existing marine traffic levels. The scope of the assessment of the marine shipping component has been defined as barge traffic in Howe Sound, Ramillies Channel, Thornbrough Channel, and Queen Charlotte Channel to south of Passage Island. The scope does not include shipping from where the barges meet the existing shipping lanes in the Strait of Georgia and in the Fraser River to BURNCO's existing facilities in Burnaby and Langley. The scope of the assessment of the marine shipping component was confirmed by the CEA Agency in a letter to BURNCO dated November 12, 2013.	Section 2.4 revised as follows: The scope of assessment of the marine shipping component of the Proposed Project consists of the barge traffic in Howe Sound, Ramillies Channel, Thornbrough Channel, and Queen Charlotte Channel to south of Passage Island (Figure 4). The scope <u>does</u> not include shipping from where the barges meet the existing shipping lanes in the Strait of Georgia and in the Fraser River to BURNCO's existing facilities in Burnaby and Langley (<u>CEA Agency 2013</u>). Section 21 revised to include: <u>CEA Agency. 2013. Letter to Mr. Derek Holmes, BURNCO Rock Products Ltd RE BURNCO Aggregate Mine Project. Dated November 12, 2013.</u>
374	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-018	3. In Section 4.5.3 (pg. 43), we request that "First Nations" be added to read: "The significance of potential residual adverse effects will be determined for each VC based on the residual effects criteria and the likelihood of a potential residual effect occurring, a review of background information and available field study results, consultation with government agencies, First Nations, and other experts, and professional judgement."	Acknowledged.	Section 4.5.3 revised as follows: The significance of potential residual adverse effects will be determined for each VC based on the residual effects criteria and the likelihood of a potential residual effect occurring, a review of background information and available field study results, consultation with government agencies, <u>First Nations</u> , and other experts, and professional judgement.

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375	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-019	4. In Section 4.5.4 (pgs. 44-47), we request clarification on the rationale for the BCEAO's changes to the Cumulative Effects Assessment section, particularly the deletion of: "The cumulative effects assessment will consider the predicted residual effects that could interact with the residual effects from other past, present or project future projects and activities."	The changes to Section 4.5.4 in dAIR/EISg Rev 2.3 dated February 26, 2014 were made to better align with prevailing policy statements and guidance, as well as to reduce duplication and redundancy in this section. The identified sentence was deleted because the same phase occurs at the beginning of the preceding paragraph which states: "Cumulative effects are defined as project-related residual effects that combine and act cumulatively with similar effects from other past, present and reasonable foreseeable projects and activities."	None proposed.
376	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-020	5. In Section 5.1.6 (pg. 55), we request that there be a change to paragraph 1. We request that the original wording ("...including any serious harm to fish resulting from irreversible alteration, disruption or destruction of fish habitat or the direct destruction of fish") be changed to read: "...including any temporary or permanent harm to fish resulting from any alteration, disruption or destruction of fish habitat or the direct destruction of fish."	Acknowledged. AIR/EIS Guidelines have been updated to reflect proponent's responsibilities to avoid, mitigate and offset threats to commercial, recreational and Aboriginal fisheries as required by current Fisheries Act and DFO policies.	Table 3 revised to include the following description of Fisheries Act requirements: <u>General prohibition of work or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery (CRA), or to fish that support such a fishery under Section 35(1) and authorization under Section 35(2) of the Fisheries Act.</u> Harmful alteration, or disruption or destruction of fish habitat under Section 35(1) and authorization under Section 35(2) of the Fisheries Act. Section 5.1 and 5.2 revised to reflect fisheries protection provisions of the <i>Fisheries Act</i> , the Fisheries Protection Policy Statement and the Fisheries Productivity Investment Policy: A Proponent's Guide to Offsetting.
377	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-021	6. In Section 5.2.3 (pg. 57), we request that all estuaries within the region of the proposed project and marine waters are included within the study area. TWN also requests that a water circulation and sediment transport model be required, to determine if water quality in English Bay and Burrard Inlet may be affected.	The Local Study Area for the marine resources assessment includes the intertidal and subtidal areas within the Proposed Project footprint including the proposed marine terminal facilities in Thornbrough Channel (barge loader and conveyor). The Regional Study Area includes the shipping route from the Proposed Project site through Howe Sound via Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel to south of Passage Island.	Section 21 revised to include: <u>CEA Agency. 2013. Letter to Mr. Derek Holmes, BURNCO Rock Products Ltd RE BURNCO Aggregate Mine Project. Dated November 12, 2013.</u>
378	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-022	7. In Section 5.2.6 (pg. 60), we request that there be a change to paragraph 1. We request that the original wording ("...including any serious harm to fish resulting from irreversible alteration, disruption or destruction of fish habitat or the direct destruction of fish") be changed to read: "...including any temporary or permanent harm to marine resources (fish, benthic communities, marine mammals, birds, etc.) resulting from any alteration, disruption or destruction of marine habitat or the direct destruction of marine resources."	Acknowledged. AIR/EIS Guidelines have been updated to reflect proponent's responsibilities to avoid, mitigate and offset threats to commercial, recreational and Aboriginal fisheries as required by current Fisheries Act and DFO policies.	Table 3 revised to include the following description of Fisheries Act requirements: <u>General prohibition of work or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery (CRA), or to fish that support such a fishery under Section 35(1) and authorization under Section 35(2) of the Fisheries Act.</u> Harmful alteration, or disruption or destruction of fish habitat under Section 35(1) and authorization under Section 35(2) of the Fisheries Act. Section 5.1 and 5.2 revised to reflect fisheries protection provisions of the <i>Fisheries Act</i> , the Fisheries Protection Policy Statement and the Fisheries Productivity Investment Policy: A Proponent's Guide to Offsetting.
379	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-023	8. In Section 9.1.5 (pg. 116), we request a definition for the term "country foods." The effects on both land and marine based "country foods" should be assessed.	Health Canada (2010) defines country foods as 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. This definition is included in Table 4.	None proposed.
380	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-024	9. In Part C, Section 13.0 (pg. 123), we request that "First Nations" be added to read: "The EAC Application/EIS will consider the federal, provincial and First Nations consultation requirements."	This section refers to consultation requirements delegated by the federal and provincial Crown. It is therefore not appropriate to include the suggested revision. Section 13 has been revised to clarify CEA Agency's consultation requirements.	Section 13 revised as follows: - Consider both federal and provincial consultation requirements, <u>including CEA Agency's requirements for the Proponent to:</u> - Describe current uses of lands and resources for traditional purposes for each <u>Aboriginal groups identified in Section 10.0, as well as potential effects of changes to the environment resulting from the Proposed Project on these uses;</u> - Provide each <u>Aboriginal group identified in Section 10.0 with an opportunity to review this information;</u> and - Summarize comments received from the <u>Aboriginal groups identified in Section 10.0 in response to the information provided.</u>
381	Hanson, Eric	Tsleil-Waututh Nation	4-Apr-14	dAIR 2.3 (26Feb2014)	TWN-025	10. Overall comment: We request maps of all the Local Study Area and Regional Study Area boundaries for the assessment.	Requested maps of local and regional study area boundaries are provided in Rev 3.0.	Section 4.3.1 revised to include: <u>Proposed LSAs and RSAs are presented in Appendix A.</u> Series of study area maps have been included as Appendix A.
382	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-012	Acronyms and Abbreviations 1. This section (page vi) defines the BC Ministry of Energy Mines as MEMPR. This should be changed to indicate that MEM refers to the Ministry of Energy and Mines. Any reference to Ministry of Energy, Mines and Natural Gas or Ministry of Energy, Mines and Petroleum Resources in the AIR and application should be changed to Ministry of Energy and Mines or MEM.	Acknowledged. AIR/EIS Guidelines revised as requested.	AIR/EIS Guideline has been clarified throughout, as requested.

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383	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-013	2. This section should make reference to the fact that the mine plan will be developed in accordance with the Health, Safety and Reclamation Code for Mines in B.C.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 2.2.3.1 revised as follows: <u>The mine plan will be developed in accordance with the Health Safety and Reclamation Code for Mines in BC.</u>
384	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-014	3. The proposed water management structures, including the basis utilized for their design, and proposed maintenance and monitoring programs, should be clearly described.	The basis for design of proposed water management structures will be described in the EAC/EIS.	Section 2.2.3.1 revised as follows: <u>The basis for design of proposed water management structures will be described.</u>
385	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-015	A detailed water management and monitoring plan should be included (as noted in Section 16.1 and 16.2) to address all phases of mine life (Construction).	A detailed water management and monitoring plan will be included to for construction, operations and reclamation and closure of the Proposed Project (Construction).	Sections 16.1 follows: <u>- Water Management and Monitoring;</u>
386	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-016	A detailed water management and monitoring plan should be included (as noted in Section 16.1 and 16.2) to address all phases of mine life (Operations).	A detailed water management and monitoring plan will be included to for construction, operations and reclamation and closure of the Proposed Project (Operations).	Sections 16.2 follows: <u>- Water Management and Monitoring;</u>
387	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-017	A detailed water management and monitoring plan should be included (as noted in Section 16.1 and 16.2) to address all phases of mine life (Reclamation and Closure).	A detailed water management and monitoring plan will be included to for construction, operations and reclamation and closure of the Proposed Project (Reclamation and Closure).	Section 2.2.5 revised as follows: A preliminary Reclamation and Closure Plan will be prepared as part of the EAC Application/EIS, and will describe the proposed measures and commitments to <u>manage, maintain and monitor water management structures</u> , remove surface facilities, and reclaim areas and develop a functional ecosystem in the freshwater pit.
388	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-018	4. Proposed plans for progressive reclamation should be described in detail, including a schedule of disturbance and reclamation, for at least the first five years of mine life, while plans for final closure may be conceptual. Research required to assess final closure plans should be considered, especially with respect to assessing feasibility of developing a functional ecosystem in the freshwater pit. All reclamation plans should be described in the context of anticipated end land use objectives and land capability.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 2.2.5 revised as follows: <u>Progressive and ongoing reclamation activities will occur throughout all phases of mine development.</u> A preliminary Reclamation and Closure Plan will be prepared as part of the EAC Application/EIS, and will describe the proposed measures and commitments to manage, maintain and monitor water management structures, remove surface facilities, and reclaim areas and develop a functional ecosystem in the freshwater pit. <u>Research required to assess closure plans will be considered.</u> <u>The Reclamation and Closure Plan will be described in the context of anticipated end land use objectives and land capability. Plans for progressive reclamation will include a schedule of disturbance and reclamation for the first five years of mine life. Plans for final closure will be conceptual.</u>
389	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-019	5. The proposed topsoil and overburden management plan should be clearly described, including specifications for the mixing of filter cake and overburden for the purposes of berm construction and reclamation. This description should consider the concept of soil suitability for revegetation purposes and the potential for segregating topsoil and overburden for separate stockpiling.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 16.1 revised as follows: Soil Management <u>- Topsoil and Overburden Management Plan, including</u> <u>- predicted inventories of topsoil and overburden;</u> <u>- soil suitability for revegetation purposes;</u> <u>- the potential for segregating topsoil and overburden for separate stockpiling;</u> <u>- stockpiling procedures and stockpile locations</u> <u>- specifications for mixing the mechanically dried fines and silt with organic overburden material for the purposes of berm construction and reclamation;</u> <u>- plans to prevent invasive species and erosion; and</u> <u>- soil replacement application strategies and depths.</u> Section 16.2 revised as follows: Soil Management <u>- Topsoil and Overburden Management Plan</u>
390	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-020	Section 4.4 Temporal Boundaries 6. This section indicates that reclamation and closure will occur "ongoing and 1 year beyond operations". The application should emphasize that progressive and ongoing reclamation activities will occur throughout all phases of mine development, not only closure and post-closure. For example, reclamation of areas disturbed during construction that will not be required for operation will be expected in the short-term and research programs to evaluate reclamation plans should be designed and implemented pro-actively. The reclamation and closure plan should seek to identify potential opportunities in this regard.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 2.2.5 revised as follows: <u>Reclamation and closure activities will be identified as measures to mitigate potential adverse effects on selected Valued Components (VCs) (e.g., use of native species, habitat composition targets, planting densities, soil salvage and amendment planning, and landform design). Key ecological linkages and timeframes for successful reclamation outcomes will be identified.</u>
391	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-021	Section 5.2 Terrestrial Wildlife and Vegetation 7. The application should include an assessment of soil suitability for reclamation and erosion potential mapping (this analysis may already be included in the Geotechnical assessment). This information should inform the relevant management plans described in Section 16.1 and 16.2 (Sediment, Erosion and Drainage Control and Soil Management).	An assessment of soil suitability for reclamation and erosion potential mapping will be included in the Geotechnical and Natural Hazards component.	Revised section 5.4.3.3 as follows: The assessment approach for the geotechnical and natural hazard assessment will include the following: <u>- Describe the geotechnical/geological conditions, erosion potential, and the physical environment within the LSA and RSA;</u> <u>- Provide an overview of background information, environmental setting and characteristics for each geotechnical and natural hazards VC;</u> <u>- Describe soil suitability for reclamation;</u>

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392	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-022	8. This section should include an assessment of invasive plant species.	Invasive plant species will be documented and an invasive Species Management Plan will be prepared.	Section 5.3.4 revised to include: - Document observed invasive plant species.
393	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-023	9. This section should link to the Reclamation and Closure Plan to be provided with the application.	Reclamation and closure activities will be identified as measures to mitigate potential effects on selected VCs.	Section 5.4.5 revised as follows: The EAC Application/EIS will identify mitigation measures and environmental management strategies to avoid, limit, or otherwise mitigate potential effects of the Proposed Project on terrestrial wildlife and vegetation VCs. <u>Measures to mitigate potential effects will be reflected in proposed reclamation and closure activities.</u>
394	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-024	Sections 16.0, 16.1, and 16.2 Environmental Management Programmes 10. This section should identify the roles and responsibilities of those involved in management and monitoring for the project.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 16.1 revised as follows: The Construction Environmental Management Programme will be developed prior to the construction of the Proposed Project. This document will <u>identify environmental management roles and responsibilities</u> and be used to identify, monitor and mitigate potential adverse effects of the Proposed Project during the construction phase ...
395	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-025	11. The construction management plans should include Invasive Species Management.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 16.1 revised to include: - <u>Invasive Species Management Plan</u> ;
396	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-026	12. The Tree and Vegetation Clearing management plan should describe salvage of large woody debris and rare plants.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 16.1 revised as follows: - <u>Tree and Vegetation Clearing Plan, including the salvage of large woody debris and rare plants</u> ;
397	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-027	13. The Soil Management Plan should include predicted inventories of topsoil and overburden, stockpiling procedures, stockpile locations, plans to prevent invasive species and erosion, soil replacement application strategies and depths.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 16.1 revised as follows: - Soil Management - <u>Topsoil and Overburden Management Plan, including</u> - <u>predicted inventories of topsoil and overburden;</u> - <u>soil suitability for revegetation purposes;</u> - <u>the potential for segregating topsoil and overburden for separate stockpiling;</u> - <u>stockpiling procedures and stockpile locations</u> - <u>specifications for mixing the mechanically dried fines and silt with organic overburden material for the purposes of berm construction and reclamation;</u> - <u>plans to prevent invasive species and erosion; and</u> - <u>soil replacement application strategies and depths.</u> Section 16.2 revised as follows: - Soil Management - <u>Topsoil and Overburden Management Plan</u>
398	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-028	14. The Reclamation and Closure Plan will be required prior to construction. It is expected that reclamation and closure activities will be identified as measures to mitigate adverse or residual effects with respect to many Valued Components. Details as to how reclamation activities will achieve these goals must be incorporated into the reclamation program. Examples include, but are not limited to, progressive reclamation, use of native species, habitat composition targets, planting densities, soil salvage and amendment planning, and landform design. Key ecological linkages and timeframes for successful reclamation outcomes must be identified. Reclamation success monitoring and research should be initiated at early stages in the Project to address information gaps.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 2.2.5 revised as follows: <u>Reclamation and closure activities will be identified as measures to mitigate potential adverse effects on selected Valued Components (VCs) (e.g., use of native species, habitat composition targets, planting densities, soil salvage and amendment planning, and landform design). Key ecological linkages and timeframes for successful reclamation outcomes will be identified.</u>

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399	McConnachie, Jennifer	Ministry of Energy and Mines, Mines and Mineral Resources Division	14-Apr-14	dAIR 2.3 (26Feb2014)	MEM-029	The application must clearly indicate how the reclamation and closure plan will result in successful reclamation as per the Reclamation Standards outlined in Section 10 of the Health, Safety and Reclamation Code for Mines in BC, such as: - Maintaining land capability objectives as they pertain to the appropriate end land uses, - Long-term erosion control, including drainage modelling on mine features such as waste rock dumps and tailings storage facilities to inform landform shaping and drainage features that may be required to ensure reclamation success and achievement of end land use objectives, - Surface preparation and compaction amelioration strategies appropriate to closure objectives for mine component features, - Soil salvage and replacement inventories and methods, - Stockpiling methods and treatments, - Conceptual revegetation plans and research programs toward tailoring prescriptions to site-specific land capability requirements and changes to environmental conditions caused by disturbance, and - Conceptual reclamation plans for all expected decommissioning activities, including preliminary scheduling.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 2.2.5 revised as follows: <u>The EAC Application/EIS will describe how the Reclamation and Closure Plan will result in successful reclamation as per the Reclamation Standards outlined in Section 10 of the Health and Safety and Reclamation Code for Mines in BC.</u>
400	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-028.1	Ref. SN-049 Selection of Valued Components The Squamish Nation has suggested the inclusion of several Valued Components (VCs) in the environmental assessment, including herring and freshwater benthic communities, among others. Please update the draft EISg/AIR to incorporate a discussion of VCs suggested by Aboriginal groups, and a rationale for the exclusion of recommended VCs. This discussion and the corresponding rationales will need to be carried forward to the EIS/Application.	AIR/EIS Guidelines revised to incorporate a discussion of VCs suggested by Aboriginal groups and rationale for their exclusion of as selected VCs, where appropriate. This discussion and the corresponding rationales will be carried forward to the EAC Application/EIS. Ref. BCEAO-017 and CEAA-036. Appendix A of Rev 3.1 (03Dec2014) revised to contain "Preliminary Valued Component and Study Area Rationale".	Section 4.2 revised to include: <u>Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided.</u> Table 4 revised to include the following clarification in relation to Marine Resources VC Forage Fish: - Forage fish (herring, surf smelt and Pacific sand lance) was raised as issue of public concern by Aboriginal groups and the public because of their importance in marine food webs. Table 4 revised to include the following in relation to Fisheries and Freshwater Habitat VCs: - <u>Although suggested by Aboriginal groups as a candidate VC, freshwater benthic communities have not been included as selected VC since freshwater productivity is being measured using water quality (including nutrients and chlorophyll), fish distribution and habitat use. Aquatic health is also being assessed as a VC under Surface Water Resources. Attention to higher trophic level VCs (salmonids), supplemented with water quality monitoring is expected to be adequate to assess the anticipated impacts of the Proposed Project. Freshwater benthic samples have been collected as the basis for aquatic health assessment and monitoring during project construction and operations since the use of benthic invertebrates and periphyton can provide meaningful indices for monitoring change in aquatic environments. (NOTE: bold added for Rev 3.1 (03 Dec2014))</u> - <u>Rationale for excluding candidate VCs from the list of selected VCs will be provided in the EAC Application/EIS.</u>
401	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-028.2	Ref. SN-049 Selection of Valued Components The Squamish Nation has suggested the inclusion of several Valued Components (VCs) in the environmental assessment, including herring and freshwater benthic communities, among others. Please update the draft EISg/AIR to incorporate a discussion of VCs suggested by Aboriginal groups, and a rationale for the exclusion of recommended VCs. This discussion and the corresponding rationales will need to be carried forward to the EIS/Application.	AIR/EIS Guidelines revised to incorporate a discussion of VCs suggested by Aboriginal groups and rationale for their exclusion of as selected VCs, where appropriate. This discussion and the corresponding rationales will be carried forward to the EAC Application/EIS. Ref. BCEAO-017 and CEAA-036. Appendix A of Rev 3.1 (03Dec2014) revised to contain "Preliminary Valued Component and Study Area Rationale".	Table 4 revised to include the following in relation to Marine Resources VC Marine Benthic Communities (flora and fauna): - <u>Although suggested by Aboriginal groups as a candidate VC, Northern abalone has not been included as selected VC since it has not been identified as a species that may potentially occur within the Proposed Project area and there are no known occurrences of Northern abalone at the site. The conclusion that there are no known occurrences is based on a desktop review (SARA Registry, BC Conservation Data Centre) and a review of habitat suitability. These results were calibrated based on dive and underwater camera video survey observations</u> - <u>Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided in the EAC Application/EIS.</u>

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402	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-028.3	<p>Ref. SN-049 Selection of Valued Components The Squamish Nation has suggested the inclusion of several Valued Components (VCs) in the environmental assessment, including herring and freshwater benthic communities, among others. Please update the draft EISg/AIR to incorporate a discussion of VCs suggested by Aboriginal groups, and a rationale for the exclusion of recommended VCs. This discussion and the corresponding rationales will need to be carried forward to the EIS/Application.</p>	<p>AIR/EIS Guidelines revised to incorporate a discussion of VCs suggested by Aboriginal groups and rationale for their exclusion of as selected VCs, where appropriate. This discussion and the corresponding rationales will be carried forward to the EAC Application/EIS.</p>	<p>Table 4 revised to include the following in relation to Terrestrial Wildlife and Vegetation VCs: - <u>Some species suggested by Aboriginal groups as candidate VCs have not been included as selected VCs (e.g., Barn swallow; Great blue heron, other raptor species and their nests; and moose, deer and black bear). In each case, selected VCs were chosen because they are particularly vulnerable or represent a biological niche that is representative of other species. For example, Common nighthawk was selected as a representative insectivorous bird species. Notwithstanding, all species at-risk identified for the Proposed Project area will be discussed in the EAC Application/EIS, with a more detailed level of analysis being provided for selected VCs which may be representative of other species.</u> - <u>Rationale for excluding species potentially occurring in the project area from the list of selected VCs will be provided in the EAC Application/EIS.</u></p>
403	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-029	<p>Ref. SN-029.2 Assessment Methodology In their letter of March 28, 2014, the Squamish Nation requests that the EIS/Application identify limitations associated with the proponent's impact assessment and data collection methodologies ... the Agency requires that the proponent document in the draft EISg/AIR that the EIS/Application will include a brief discussion of assumptions associated with the impact assessment and data collection methodologies for each VC.</p>	<p>Acknowledged. Section 4.5.3 of the AIR/EIS Guidelines require that potential project-related residual effects be characterized as the basis for determining the significance of potential residual adverse effects for each VC. The level of confidence for each predicted effect will be discussed to characterize the level of uncertainty associated with both the significance and likelihood determinations. The sources and nature of uncertainty associated with residual effect predictions will be described to provide the basis for the stated level of confidence.</p>	<p>Section 4.5.3 clarified as follows: Potential project-related residual effects will be characterized as the basis for determining the significance of potential residual adverse effects for each VC. The level of confidence for each predicted effect will be discussed to characterize the level of uncertainty associated with both the significance and likelihood determinations. The sources and nature of uncertainty associated with residual effect predictions, including limitations of data collection and impact assessment methodologies, will be described to provide the basis for the stated level of confidence.</p>
404	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-030	<p>Ref. SN-018.1 The Squamish Nation notes that there is no information in the draft EISg/AIR which describes how information on the coastal tailed frog will be collected. Where survey methodology is described in the draft EISg/AIR, it does not appear to apply to the coastal tailed frog. The Agency requires the draft EISg/AIR to be updated to include the requirement for information on how the coastal tailed frog will be studied (i.e., survey methodology and standards, etc.).</p>	<p>Surveys were conducted to assess potential amphibian breeding habitat, including coastal tailed frog, within the Project Area. There was no suitable coastal tailed frog breeding habitat observed within the Project Area. Subsequent amphibian surveys focused on species which may breed within the Project Area following Inventory Methods for Pond-breeding Amphibians and Painted Turtle, Version 2.0 (RIC 1998a). The Squamish Nation had previously stated (SN-018) that coastal tailed frog was known to occur in Harlequin Creek. While there may be more suitable habitat upstream, there was no suitable coastal tailed frog breeding habitat observed in the area of Harlequin Creek that may interact with Project-related activities. Therefore, no further study specifically related to coastal tailed frog was determined to be required.</p>	<p>Section 5.3.3 references "Inventory Methods for Pond-breeding Amphibians and Painted Turtle, Version 2.0 (RIC 1998a); Section 5.3.4, states that breeding surveys for pond-breeding amphibians were conducted following RISC guidelines and that general transects were conducted around identified breeding ponds to document adult amphibians. No further revisions are proposed.</p>
405	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-031	<p>Ref. SN-050 Consideration of Squamish Interests The Squamish Nation requests that the proponent's commitment to complete a Traditional Use Study be documented in the draft EISg/AIR. While the Agency does not require proponents to complete Traditional Use Studies, the Agency does require that the proponent collect information on current use of lands and resources for traditional purposes. The Agency encourages BURNCO Rock Products Ltd. to work with the Squamish Nation to incorporate information from Traditional Use Studies in the EIS/Application.</p>	<p>Acknowledged. Section 11 of the AIR/EIS Guidelines requires the EAC Application/EIS to provide a non-confidential summary of past, present, and anticipated future uses of lands and resources in the Proposed Project area by Aboriginal groups including but not limited to current use of lands and resources for traditional purposes. BURNCO has supported a Squamish Nation-led study that is intended to identify Squamish Nation interests in the project area and potential adverse project effects to those interests. The effects assessment will consider traditional ecological or community knowledge, where available.</p>	<p>Section 13 revised as follows: - Consider both federal and provincial consultation requirements, including CEA Agency's requirements for the Proponent to: - <u>Describe current uses of lands and resources for traditional purposes for each Aboriginal groups identified in Section 10.0, as well as potential effects of changes to the environment resulting from the Proposed Project on these uses;</u> - <u>Provide each Aboriginal group identified in Section 10.0 with an opportunity to review this information; and</u> - <u>Summarize comments received from the Aboriginal groups identified in Section 10.0 in response to the information provided.</u></p>

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	Commenter (Name)	Agency / First Nation	Date					
406	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-032	Ref. SN-048.2 The Agency requires that the proponent provide a cumulative effects assessment in accordance with the Agency's Operation Policy Statement "Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act (Updated November 2007).	Acknowledged. AIR/EIS Guidelines revised to reference the CEA Agency's Operational Policy Statement related to addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act, in addition to associated guidance documents.	Section 4.5.4 revised as follows: The following <u>policy statements and guidance documents guidelines and standards</u> will be used: - <u>Operational Policy Statement: Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act (CEA Agency 2007)</u> ; - Addressing Cumulative Environmental Effects. A Reference Guide for the Canadian Environmental Assessment Act. (CEA Agency 1994); - Cumulative Effects Practitioners Guide (CEA Agency 1999); - Guideline for the Selection of Valued Components and Assessment of Potential Effects (BCEAO 2013). CEA Agency 2007 added to Section 21 References.
407	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-033.1	Ref. SN-053 In their comments, the Squamish Nation expressed concern that the mitigation measures and follow-up program may not be detailed enough in the EIS/Application to support enforcement of the proponent's commitments. The agency requires that the proponent define mitigation measures in the EIS/Application in a specific, achievable, measureable and verifiable way. A commitment to frame mitigation measures in this way should be included in the EISg/AIR.	Section 4.5.2 includes provisions to describe practical measures proposed to mitigate to an acceptable level potential adverse environmental, economic, social, heritage or health effects of the proposed Project on selected VCs. Descriptions of proposed mitigation measures in the EAC Application/EIS will include: - their suitability for project- and site-specific application; - their technical and economic feasibility; and - the extent to which their effectiveness can be measured and verified, including linkages to the Environmental Monitoring and Follow-up Program where appropriate. The level of detail provided will be commensurate with the risk associated with the potential effect being mitigated, and the degree to which the proposed mitigation has been proven effective in the same or similar applications elsewhere. Any uncertainty associated with the effectiveness of proposed mitigation measures will be described. Section 17 includes requirements to outline a monitoring and reporting structure that will be adopted to verify the accuracy of the EA and to monitor the implementation of the effectiveness of proposed mitigation.	Section 4.5.2 revised as follows: Descriptions of proposed mitigation will demonstrate the technical and economic feasibility of the measures, including their suitability for project- and site-specific application, if necessary. <u>Linkages will be made to the Environmental Monitoring and Follow-up Program presented in Section 17.0 where appropriate to monitor and verify the effectiveness of the measure proposed to mitigate potential environmental effects.</u> The level of detail provided will be commensurate with the risk associated with the potential effect being mitigated, and the degree to which the proposed mitigation has been proven effective in the same or similar applications elsewhere. Any uncertainty associated with the effectiveness of proposed mitigation measures will be described.
408	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-033.2	Ref. SN-053 In their comments, the Squamish Nation expressed concern that the mitigation measures and follow-up program may not be detailed enough in the EIS/Application to support enforcement of the proponent's commitments. The agency requires that the proponent define mitigation measures in the EIS/Application in a specific, achievable, measureable and verifiable way. A commitment to frame mitigation measures in this way should be included in the EISg/AIR.	Section 4.5.2 includes provisions to describe practical measures proposed to mitigate to an acceptable level potential adverse environmental, economic, social, heritage or health effects of the proposed Project on selected VCs. Descriptions of proposed mitigation measures in the EAC Application/EIS will include: - their suitability for project- and site-specific application; - their technical and economic feasibility; and - the extent to which their effectiveness can be measured and verified, including linkages to the Environmental Monitoring and Follow-up Program where appropriate. The level of detail provided will be commensurate with the risk associated with the potential effect being mitigated, and the degree to which the proposed mitigation has been proven effective in the same or similar applications elsewhere. Any uncertainty associated with the effectiveness of proposed mitigation measures will be described. Section 17 includes requirements to outline a monitoring and reporting structure that will be adopted to verify the accuracy of the EA and to monitor the implementation of the effectiveness of proposed mitigation.	Section 15 revised as follows: Mitigation Measures – The EAC Application/EIS will identify mitigation measures that are technically and economically feasible that would avoid and limit the environmental effects described in Sections 5.0 - 9.0. <u>Descriptions of proposed mitigation will include:</u> - <u>their suitability for project- and site-specific application;</u> - <u>their technical and economic feasibility; and</u> - <u>the extent to which their effectiveness can be measured and verified, including linkages to the Environmental Monitoring and Follow-up Program presented in Section 17.0 where appropriate.</u> The level of detail provided will be commensurate with the risk associated with the potential effect being mitigated, and the degree to which the proposed mitigation has been proven effective in the same or similar applications elsewhere. Any uncertainty associated with the effectiveness of proposed mitigation measures will be described.

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	Commenter (Name)	Agency / First Nation	Date					
409	Inouye, Kevin	Canadian Environmental Assessment Agency	7-Jul-14	dAIR 2.3 (26Feb2014)	CEAA-034	Ref. SN-054 The Squamish Nation has identified to the Agency the importance of a robust follow-up and monitoring program for this project that is supported by appropriate funding. The Agency encourages BURNCO Rock Products Ltd. to work with the Squamish Nation throughout the development and implementation of a follow-up and monitoring program for the Project to identify opportunities for Squamish Nation participation.	Section 17 includes requirements to outline a monitoring and reporting structure that will be adopted to verify the accuracy of the EA and to monitor the implementation of the effectiveness of proposed mitigation. This section will be revised to describe requirements to define funding responsibilities and potential opportunities for the involvement of Aboriginal groups in the development and implementation of a follow-up and monitoring program.	Section 17 revised as follows: The EAC Application/EIS will outline the compliance monitoring and reporting structure that will be adopted and will include the following to: - Verify the accuracy of the environmental assessment of the Proposed Project; and - Monitor the implementation and effectiveness of any measures taken to mitigate the adverse environmental effects of the Proposed Project. The EAC Application/EIS will include the following information regarding follow-up programs: - Monitoring objectives; - Main program components, specific monitoring activities and schedule (including duration); and - Effectiveness assessment, including adaptive management, of measures proposed to mitigate potential environmental effects; - Potential opportunities for the involvement of Aboriginal groups in the development and implementation of a follow-up and monitoring program; and - Funding responsibilities.
410		Transport Canada	7-Jul-14	dAIR 2.3 (26Feb2014)	TC-029	Transport Canada has identified that the Eagle Mountain – Woodfibre Gas Pipeline Project should be added to Table 5 of the BURNCO EISg/AIR for consideration in the cumulative effects assessment. Please ensure that the Eagle Mountain – Woodfibre Gas Pipeline Project is included in Table 5 of the BURNCO EISg/AIR.	Acknowledged. AIR/EIS Guidelines revised as requested.	Table 5 revised to specify Fortis BC's Eagle Mountain-Woodfibre Gas Pipeline Project.
411	Gibson, Corrinne	Fisheries and Oceans Canada	10-Jul-14	dAIR 2.3 (26Feb2014)	DFO-013.1	With respect to comment 1, DFO-013, we were informing the proponent of the changes to the Fisheries Act and requesting that the text be updated to reflect the current Act and policies. The proponent acknowledged our comment but states no changes to the text have been made. Not sure if this was an oversight. The information provided by the proponent should reflect the current legislation and policies. If the information is not characterized in this regard, it may be difficult for us to determine the scale and extent of the serious harm to fish and fish habitat and if the proposed offsetting is appropriate and sufficient to balance the impacts to the fisheries. We still recommend that the EISg should be updated to reflect the current Fisheries Act and policies	Acknowledged. AIR/EIS Guidelines have been updated to reflect proponent's responsibilities to avoid, mitigate and offset threats to commercial, recreational and Aboriginal fisheries as required by current Fisheries Act and DFO policies.	Table 3 revised to include the following description of Fisheries Act requirements: General prohibition of work or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery (CRA), or to fish that support such a fishery under Section 35(1) and authorization under Section 35(2) of the Fisheries Act. Harmful alteration, or disruption or destruction of fish habitat under Section 35(1) and authorization under Section 35(2) of the Fisheries Act. Section 5.1 and 5.2 revised to reflect fisheries protection provisions of the Fisheries Act, the Fisheries Protection Policy Statement and the Fisheries Productivity Investment Policy: A Proponent's Guide to Offsetting.
412		Health Canada	14-Jul-14	dAIR 2.3 (26Feb2014)	HC-009.1	Health Canada (HC) has raised a concern with BURNCO Rock Products Ltd's response to comment HC-009. HC is concerned that the "quantification of SO2 and NO2 emissions" will result in the presentation of emission rates rather than concentrations. We understand that the proponent will undertake dispersion modelling for the Criteria Air Contaminants (CAC) being assessed (e.g., SO2, NO2, PM2.5, etc.) such that predicted concentrations of CACs during project operations at specific receptor locations can be compared to existing baseline levels. The quantification of emissions alone (i.e., in tonnes/yr) would not enable a comparison with applicable air quality standards or objectives. Given the proximity of residences to the Project location, HC is of the opinion that dispersion modelling results would help to inform an understanding of potential human health risks from Project-related changes to air quality. Health Canada would prefer an assessment of the following scenarios for air quality: baseline alone (i.e., before the Project scenario), Project alone, Project plus baseline, and cumulative (i.e., Project plus baseline plus all other approved or reasonably foreseeable projects). The proponent's response to comment HC-009 notes that the BC MoE accepts the removal of dustfall as an indicator. Please provide me with response MOE-EP-012 for Health Canada's consideration. Health Canada's comment that SO2, NO2, PM2.5, PM10, and dust fall continue to be assessed for this Project still stands.	Additional dispersion modelling will be undertaken at the human health receptors (that will include the McNab Creek strata property) to assess ambient concentrations of NO2 and SO2 from the Project due to tug movements in the vicinity of the Project. This will include emissions of the tug while maneuvering in the vicinity of the Project dock area. Since only one tug movement per day is expected, and tug maneuvering is expected to be less than an hour in duration, the ambient concentrations will be compared to relevant short term (1 hour) ambient air quality criteria. The project contribution of NO2 and SO2 will be added to background concentrations for comparison to relevant ambient criteria. The background concentrations used, the project contribution and the combined background and project contributions will be provided. Additional longer averaging periods may be added based on the results of the 1 hour comparison.	Table 4 revised to include: - BC Ambient Air Quality Objectives (AAQO) and National Ambient Air Quality Objectives (NAAQO) for TSP, PM10, and PM2.5, SO2 and NO2, where applicable; - Since Project-related exhaust emissions will be limited, it is expected that emissions of SO2 and NO2 from the Project will be minimal and will not contribute significantly to the ambient air quality. This will be confirmed through quantification of SO2 and NO2 emissions. Detailed model plan filed with BCMOE revised to reflect additional modelling effort as described in Proponent Response.
413		Health Canada	14-Jul-14	dAIR 2.3 (26Feb2014)	HC-009.2	The proponent's response to comment HC-009 notes that the BC MoE accepts the removal of dustfall as an indicator. Please provide me with response MOE-EP-012 for Health Canada's consideration. Health Canada's comment that SO2, NO2, PM2.5, PM10, and dust fall continue to be assessed for this Project still stands.	BCMOE's comment is reflected in item MOE-EP-044 above. Deposition data will be included in the public health and water quality discipline effects assessments.	Table 4 revised to include: - Particulate deposition resulting from project operations will be quantified to be used in the Public Health and other assessments, as needed.

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414	Hatziantoniou, Yota	Health Canada	31-Jul-14	dAIR 2.3 (26Feb2014)	HC-009.11	I am generally satisfied with the Proponent's responses [HC-009.1 and HC-009.2] - particularly with respect to undertaking additional dispersion modelling at the human receptors (that will include the McNab Strata community) to assess ambient concentrations of NO2 and SO2 from the Project due to tug movements in the vicinity of the Project. The only thing that is not clear from the table, is the Proponent's commitment to also assess (model) PM2.5 and PM10 at these human receptor locations. Health Canada would prefer the inclusion of these parameters to provide a more comprehensive assessment of potential human health impacts to this local community.	Acknowledged. Proponent response to HC-009.1 revised as follows to address this comment: Additional dispersion modelling will be undertaken at the human health receptors (that will include the McNab Strata community) to assess ambient concentrations of NO2 and SO2, <u>PM2.5 and PM10</u> from the Project due to tug movements in the vicinity of the Project. This will include emissions of the tug while maneuvering in the vicinity of the Project dock area. Since only one tug movement per day is expected, and tug maneuvering is expected to be less than an hour in duration, the ambient concentrations will be compared to relevant short term (1 hour) ambient air quality criteria <u>for NO2 and SO2, and short term (24 hour) ambient air quality criteria for PM2.5 and PM10</u> . The project contribution of NO2 and SO2 will be added to background concentrations for comparison to relevant ambient criteria. <u>The contribution of PM2.5 and PM10 from tug boat emissions will be added to the contribution from the wider project and will be added to background concentrations for comparison to relevant ambient criteria.</u> The background concentrations used, the project contribution and the combined background and project contributions will be provided. Additional longer averaging periods may be added based on the results of the <u>short term (1 hour and 24 hour)</u> comparison.	See HC-009.1. No further change to dAIR/EISg proposed. Detailed model plan filed with BCMOE revised to reflect additional modelling effort as described in Proponent Response .
415	Inouye, Kevin	Canadian Environmental Assessment Agency	18-Aug-14	dAIR 2.3 (26Feb2014)	CEAA-035	I have consulted TC and DFO, and we do not have any comments on your responses [to TC-029 and DFO 013.1].	Acknowledged.	None proposed.
416	Rafael, David	Sunshine Coast Regional District	8-Sep-14	July 2014 Layout	SCRD-008	With the change in processing area, reduction of the tree buffer and introduction of a berm around the east/south side of the processing area, does the AIR need to be amendment to reflect the need to consider the detailed berm design and its ability to reduce noise impact?	Rev 3.0 of the AIR/EIS Guidelines (dated August 20, 2014) reflects the processing area changes, including the changes to the proposed dirt berm and treed foreshore buffer. Note that the berm is not a new feature since it was part of the earlier design concept; it has, however, been extended somewhat with the more detailed design. The refinements to the processing area design will be reflected in the noise assessment and the effectiveness of proposed mitigation on potential noise effects will be described.	None proposed.
417	Rafael, David	Sunshine Coast Regional District	8-Sep-14	July 2014 Layout	SCRD-009	Another possible concern is will the reduced tree cover increase risk of windthrow further degrading the buffer? This should also be addressed.	Since no new tree stands are being created, potential increase windthrow risk resulting from a reduced treed buffer is not considered to be a substantial issue. However, it will be addressed within the terrain hazard component.	None proposed.
418	Brzozowski, Aleksandra	Islands Trust Gambier Local Trust Committee	18-Sep-14	July 2014 Layout	ITNO-011	<u>Treed Buffer Project Component</u> The decrease of the treed foreshore buffer to a potential minimum of 25 metres is an excessive decrease and should be amended. Mitigating potential impacts on the foreshore environment including dust and particulate absorption, as well as the poential impact on noise disturbance, seems to warrant a significant treed buffer. If this requirement is not amended, the Gambier Local Trist Committee requests an explanation for the rationale to decrease the required treed buffer from 300 metres in the initial drafts of the AIR guideline down to 25-50 metres.	The AIR/EIS Guidelines reflects the processing area changes, including the changes to the proposed treed foreshore buffer. To clarify, the treed buffer between the foreshore and the portion of the pit east of the processing area remains up to 300 metres wide. Following detailed engineering design, a larger processing area was required to accommodate stockpiles and the required system of conveyors to move the material around the site and to the barge loadout facility. The ability to expand the processing is restricted by fisheries values and the proximity of local residents. As a result the processing area expanded mainly towards to the foreshore and the width of the treed buffer adjacent to this area reduced from 75-160m to 25-50m, plus and extended 20m wide dirt berm. The refinements to the processing area design will be reflected in the noise, air quality and visual resource effects assessments presented in the EAC Application.	None proposed.
419	Brzozowski, Aleksandra	Islands Trust Gambier Local Trust Committee	18-Sep-14	July 2014 Layout	ITNO-012	<u>Marine Benthic Communities</u> The Islands Trust is please to see the inclusion of glass sponges as a community to assess for possible impact.	Acknowledged.	None proposed.

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420	Chief Bill Williams	Squamish Nation	22-Sep-14	dAIR 3.0 (20Aug2014)	SN-055	Omnibus Ref BCEAO-017, BCEAO-018, CEAA-036.	BCEAO advised that no further response from BURNCO is required since the issues raised have all been addressed previously by BURNCO or by BCEAO/CEAA/ BCEAO/CEAA will respond directly to Squamish Nation to direct their attention to the earlier responses. AIR/EIS Guidelines will be revised to: - ADD pink salmon and their habitat to Fisheries and Freshwater Resources VCs; - ADD Aquatic Health to Surface Water Resource VCs; - clarify and refine study area boundaries, especially for Fisheries and Freshwater Habitat, Surface Water Resources and Groundwater Resources; and - ADD Appendix A to present a "Preliminary Valued Component and Study Area Rationale".	Appendix A revised to contain "Preliminary Valued Component and Study Area Rationales". Table 4 revised as follows: - Fisheries and Freshwater Habitat - Anadromous chum and coho, and pink salmon and cutthroat trout species and their habitats. - Although suggested by Aboriginal groups as a candidate VC, freshwater benthic communities have not been included as selected VC since freshwater productivity is being measured using water quality (including nutrients and chlorophyll), fish distribution and habitat use. <u>Aquatic health is also being assessed as a VC under Surface Water Resources</u> . Attention to higher trophic level VCs (salmonids), supplemented with water quality monitoring is expected to be adequate to assess the anticipated impacts of the Proposed Project. Freshwater benthic samples have been collected as the basis for <u>aquatic health assessment and</u> monitoring during project construction and operations since the use of benthic invertebrates and periphyton can provide meaningful indices for monitoring change in aquatic environments. - ADD <u>Aquatic Health</u> as a VC under Surface Water Resources.
421	Hanson, Erin	Tsleil-Waututh Nation	1-Oct-14	July 2014 Layout	TWN-026	Tsleil-Waututh is concerned that the processing area and stockpiles have increased significantly. To accommodate this proposed project size increase, we request information on the percentage of second growth forest that will be fallen, as well as the additional number of trees to be fallen from the July 2014 revisions, in comparison to what was planned in September 2013.	Refinements were made to the size and orientation of the processing area components of the BURNCO Aggregate Project (the Project). The nature, extent and rationale for these changes were presented in our August 5, 2014 memo. In response to your specific question about the increase in mature 2nd growth forest that will be removed compared to the September 2013 conceptual layout, we have calculated that an additional 6.85 acres will be cleared.	None proposed.
422	Hanson, Erin	Tsleil-Waututh Nation	1-Oct-14	July 2014 Layout	TWN-027	Tsleil-Waututh notes that the new location of the barge load out area is closer to McNab Creek which has a greater potential to impact this significant fish-bearing estuary in Howe Sound. Tsleil-Waututh request to receive all reports and studies on McNab Creek's fish and fish habitat, marine mammals, intertidal zone, and marine water quality when available.	You have requested copies of "all reports and studies on McNab Creek's fish and fish habitat, marine mammals, intertidal zone and marine water quality". We are please to share the following baseline study documents on fish and freshwater habitat, marine resources, surface water resources and groundwater resources which will be reflected in our effects assessment: APPENDIX 5.1-A Fisheries and Freshwater Habitat Baseline APPENDIX 5.2-A Marine Biophysical Baseline APPENDIX 5.2-B Marine Mammal Baseline APPENDIX 5.5-A Surface Water Hydrological Baseline APPENDIX 5.5-B Baseline Data Report: McNab Valley Surface Water Quality, 2009 – 2014 APPENDIX 5.6-A Hydrogeological Characterization (Groundwater Flow) APPENDIX 5.6-B Geochemical Evaluation of Groundwater Samples (Groundwater Quality) We would be pleased to discuss the results of these studies with you or to respond to any further questions you may have.	None proposed.
423	Hanson, Erin	Tsleil-Waututh Nation	1-Oct-14	July 2014 Layout	TWN-028	Tsleil-Waututh does appreciate the more robust dirt berm that will be extending out from the increased processing area.	With respect the processing area vegetated dirt berm, we can confirm that it will be more substantial than previously proposed and will cover 9,083 m2, compared to 1,348 m2 in the Sept 2013 conceptual layout. In addition, the shorter large loading conveyor requires a buffer area of 962 m2 compare to 3,305 m2 proposed previously.	None proposed.
424	Nohr, Garry	Sunshine Coast Regional District	10-Oct-14	dAIR 3.0 (20Aug2014)	SCRD-010	The AIR should be amended to include an analysis of the proposed berm as a means of reducing potential noise impact and the supporting information provided in the application should address this.	Rev 3.0 of the AIR/EIS Guidelines (dated August 20, 2014) reflects the processing area changes, including the changes to the proposed dirt berm and treed foreshore buffer. Note that the berm is not a new feature since it was part of the earlier design concept; it has, however, been extended somewhat with the more detailed design. The refinements to the processing area design will be reflected in the noise assessment and the effectiveness of proposed mitigation on potential noise effects will be described.	None proposed.

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425	Nohr, Garry	Sunshine Coast Regional District	10-Oct-14	dAIR 3.0 (20Aug2014)	SCRD-011	The AIR should be amended to address the potential impacts of reducing the tree buffer with regard to potential increase in windthrow and the supporting information provided within the application should address this.	Since no new tree stands are being created, potential increase windthrow risk resulting from a reduced treed buffer is not considered to be a substantial issue. However, it will be addressed within the terrain hazard and terrestrial vegetation components.	None proposed.
426	Nohr, Garry	Sunshine Coast Regional District	10-Oct-14	dAIR 3.0 (20Aug2014)	SCRD-012	The AIR should be amended to address the increased production volume in a reduced time period with respect to concerns as follows: - address the reduced tree buffer and change to processing storage area; - reanalyze the effects on the foreshort due to increased removal of trees; - reanalyze lighting impacts on biological and visual values due to removal of more trees than originally proposed; - assessment of noise impacts is conducted, including monitoring of the activity during operation to ensure that noised impact standards are met, should the mine be approved; - enforcement measures be set out to address any failures to meet standards, if this proposed project proceeds.	The average production rate remains unchanged at 1.0 million tonnes per year (MTPA). The maximum production rate has been reduced from 1.6 MTPA to 1.0 MTPA. Rev 3.0 of the AIR/EIS Guidelines (dated August 20, 2014) reflects the processing area changes, including the changes to the proposed dirt berm and treed foreshore buffer. The refinements to the processing area design will be reflected in the noise, air quality and visual resource effects assessments presented in the EAC Application. The EAC Application/EIS will include an environmental monitoring and follow-up program to verify the accuracy of the assessment and monitor the effectiveness of proposed measures to avoid or reduce potential effects. The program will be adapted, as needed, to effectively manage environmental effects. The BCEAO will develop a Compliance Management Plan to ensure compliance of conditions of an EA Certificate, if granted.	None proposed.
427	Haines, Kate	British Columbia Environmental Assessment Office	19-Nov-14	dAIR 3.0 (20Aug2014)	BCEAO-017	Either include the rationales for exclusions of VCs in the AIR, or provide such information in writing to Squamish Nation before the AIR/EIS Guidelines are issued.	AIR/EIS Guidelines will be revised to: - ADD pink salmon and their habitat to Fisheries and Freshwater Resources VCs; - ADD Aquatic Health to Surface Water Resource VCs; and - ADD Appendix A to present a "Preliminary Valued Component and Study Area Rationale".	Appendix A revised to contain "Preliminary Valued Component and Study Area Rationales". Table 4 revised as follows: - Fisheries and Freshwater Habitat - Anadromous chum and coho, <u>and pink</u> salmon and cutthroat trout species and their habitats. - Although suggested by Aboriginal groups as a candidate VC, freshwater benthic communities have not been included as selected VC since freshwater productivity is being measured using water quality (including nutrients and chlorophyll), fish distribution and habitat use. <u>Aquatic health is also being assessed as a VC under Surface Water Resources.</u> Attention to higher trophic level VCs (salmonids), supplemented with water quality monitoring is expected to be adequate to assess the anticipated impacts of the Proposed Project. Freshwater benthic samples have been collected as the basis for <u>aquatic health assessment and</u> monitoring during project construction and operations since the use of benthic invertebrates and periphyton can provide meaningful indices for monitoring change in aquatic environments. - ADD <u>Aquatic Health</u> as a VC under Surface Water Resources.
428	Haines, Kate	British Columbia Environmental Assessment Office	19-Nov-14	dAIR 3.0 (20Aug2014)	BCEAO-018	Either include additional detail on the rationales for study area boundaries in the AIR/EIS Guidelines, or provide such information in writing to Squamish Nation before the AIR/EIS Guidelines are issued.	AIR/EIS Guidelines will be revised to: - clarify and refine study area boundaries, especially for Fisheries and Freshwater Habitat, Surface Water Resources and Groundwater Resources; and - ADD Appendix A to present a "Preliminary Valued Component and Study Area Rationale".	Appendix A revised to contain "Preliminary Valued Component and Study Area Rationales", including updated study area maps.
429	Inouye, Kevin	Canadian Environmental Assessment Agency	19-Nov-14	dAIR 3.0 (20Aug2014)	CEAA-036	The Squamish Nation has requested the AIR/EIS Guidelines include a rationale for the exclusion of VCs recommended by Aboriginal groups, such as traditional use and medicinal plants, moose, deer, elk, black bear, and raptor species. Please update the draft AIR/EIS Guidelines to include a rationale for the exclusion of VCs recommended by Aboriginal Groups. This discussion and corresponding rationales will need to be carried forward in the Application/EIS.	AIR/EIS Guidelines will be revised to: - ADD pink salmon and their habitat to Fisheries and Freshwater Resources VCs; - ADD Aquatic Health to Surface Water Resource VCs; and - ADD Appendix A to present a "Preliminary Valued Component and Study Area Rationale".	Appendix A revised to contain "Preliminary Valued Component and Study Area Rationales". Table 4 revised as follows: - Fisheries and Freshwater Habitat - Anadromous chum and coho, <u>and pink</u> salmon and cutthroat trout species and their habitats. - Although suggested by Aboriginal groups as a candidate VC, freshwater benthic communities have not been included as selected VC since freshwater productivity is being measured using water quality (including nutrients and chlorophyll), fish distribution and habitat use. <u>Aquatic health is also being assessed as a VC under Surface Water Resources.</u> Attention to higher trophic level VCs (salmonids), supplemented with water quality monitoring is expected to be adequate to assess the anticipated impacts of the Proposed Project. Freshwater benthic samples have been collected as the basis for <u>aquatic health assessment and</u> monitoring during project construction and operations since the use of benthic invertebrates and periphyton can provide meaningful indices for monitoring change in aquatic environments. - ADD <u>Aquatic Health</u> as a VC under Surface Water Resources.

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430	Inouye, Kevin	Canadian Environmental Assessment Agency	19-Nov-14	dAIR 3.0 (20Aug2014)	CEAA-015.3.1	Ref CEAA-015.1 The Agency accepts the proponent's proposed changes to the draft AIR / EIS Guidelines; however, the proposed sentence with included edits in Section 5.7.3.2 and 5.8.3.2 does not appear in the revised draft AIR / EIS Guidelines	Air Quality RSA was redefined to correspond to the wider area used for the dispersion modelling domain, approximately 80 km by 80 km centred on the proposed Project site. For the Climate Change component, spatial boundaries are not defined since climate change is, by nature, a regional/global issue.	None proposed.
431	Inouye, Kevin	Canadian Environmental Assessment Agency	19-Nov-14	dAIR 3.0 (20Aug2014)	CEAA-027.1	Ref CEAA-027 The Agency accepts the proposed changes to the document; however, the proposed change to Section 15 (Accidents and Malfunctions) is missing.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 15 (Accidents and Malfunctions) revised as follows: - Identify potential accidents, malfunctions, and unplanned events that could occur in any phase of the Proposed Project, the likelihood and circumstances under which these events could occur and the environmental effects that may result from such events, <u>including impacts to marine benthic communities</u> , assuming contingency plans are not fully effective.
432	Inouye, Kevin	Canadian Environmental Assessment Agency	19-Nov-14	dAIR 3.0 (20Aug2014)	CEAA-028.1.1	Ref CEAA-028.1 Please add that the recommended VCs were suggested by Aboriginal groups. One option: "Rationale for excluding species <u>recommended by Aboriginal Groups</u> potentially occurring in the project area from the list of selected VCs will be provided".	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 4.2 revised to include: Rationale for excluding species potentially occurring in the project area from the list of selected VCs, <u>although they have been recommended by Aboriginal Groups to be included as VCs</u> , will be provided.
433	Inouye, Kevin	Canadian Environmental Assessment Agency	19-Nov-14	dAIR 3.0 (20Aug2014)	CEAA-029.1	Ref CEAA-029 The Agency accepts the proposed clarification to section 4.5.3; however, it is not included in the draft AIR / EIS Guidelines. Please include the proposed change in Section 4.5.3.	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 4.5.3 clarified as follows: The sources and nature of uncertainty associated with residual effect predictions, <u>including limitations of data collection and impact assessment methodologies</u> , will be described to provide the basis for the stated level of confidence.
434	Inouye, Kevin	Canadian Environmental Assessment Agency	19-Nov-14	dAIR 3.0 (20Aug2014)	CEAA-032.1	Ref CEAA-032 Please also reference the Agency's Operation Policy Statement in Section 15 "Requirements for Federal Environmental Assessments" under the "Cumulative Environmental Effects" heading	Acknowledged. AIR/EIS Guidelines revised as requested.	Section 15 revised as follows: <u>The following federal policy statements and guidance documents will be used:</u> - <u>Operational Policy Statement: Addressing Cumulative Environmental Effects under the Canadian Environmental Assessment Act (CEA Agency 2007);</u> - <u>Addressing Cumulative Environmental Effects. A Reference Guide for the Canadian Environmental Assessment Act (CEA Agency 1994); and</u> - <u>Cumulative Effects Practitioners Guide (CEA Agency 1999).</u>
435	Sundherm Avtar	Ministry of Environment, Environmental Protection Authorizations - South	7-May-15	dAIR 3.0 (20Aug2014)	MOE-EP-047	Based on your statement, "There are no discharges from this operation", no EMA authorizations are required.	Acknowledged.	None proposed.
436	Derochers, Dale	Fisheries and Oceans Canada	10-Jun-15	Habitat Offset Plan (20May2015)	DFO-014	General Any proposed offsetting plan should clearly identify all fish species and life stages targeted and how the offsetting measures will increase productivity for each fish species and life stage targeted. The plan should discuss project effects on the local fish populations, including the utilization and dependency of affected habitat and how this relates to changes in productivity. The values and limiting factors of existing channel reaches should be discussed including how the project effects may impact productivity of the various fish species, including the importance and resilience of the local fish populations.	Thank you for the information provided. The offsetting plan in combination with the Fisheries and Freshwater Habitat chapter (5.1) will be revised to reflect the guidance provided.	The offsetting plan has been revised with specific references to the relevant information provided in the Fisheries and Freshwater Habitat chapter (5.1).
437	Derochers, Dale	Fisheries and Oceans Canada	10-Jun-15	Habitat Offset Plan (20May2015)	DFO-015	The offsetting plan submitted during the EA application should include a variety of alternative offsetting options for consideration in case the proposed preferred option is found insufficient or not esupported by regulators in consultation with First Nations.	A variety of habitat offsetting options were provided to DFO prior to the development of this offsetting plan. The majority of the offsetting options were reviewed by DFO and determined to be less preferred. DFO's review (DFO 2011) is referenced in the plan. The design concept for the channel extension has also been shared with the Squamish First Nation.	The text of the plan will be adjusted to reflect that the design concept for the channel extension is adjustable and can be expanded if additional offsetting is required. The plan will also be modified to include the addition of 10 m ² of horizontal habitat structures incorporated into the piling structures supporting the conveyer system. These horizontal structures will provide intertidal habitat for marine algae and sessile macrofauna.
438	Derochers, Dale	Fisheries and Oceans Canada	10-Jun-15	Habitat Offset Plan (20May2015)	DFO-016	No discussion or data on flow management and flow rates through the proposed offsetting channel have been provided (annual hydrograph).	Details of regarding predicted flows for the channel extension are provided in the Surface Water Resources chapter (Sec. 5.5.5.1.2.1).	A reference to the assessment provided in the Surface Water Resources Chapter will be provided.
439	Derochers, Dale	Fisheries and Oceans Canada	10-Jun-15	Habitat Offset Plan (20May2015)	DFO-017	No information or discussion has been presented on the influence and extent of tidal backwatering and flow inputs from the impoundment reservoir on the proposed and existing channel.	The influence and extent of tidal backwatering is discussed in the Fisheries and Freshwater Habitat chapter (Sec. 5.1.4.2.1)	A reference to the assessment provided in the Fisheries and Freshwater Habitat Chapter will be provided.

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440	Derochers, Dale	Fisheries and Oceans Canada	10-Jun-15	Habitat Offset Plan (20May2015)	DFO-018	No assessment of potential effects of proposed offsering measures to existing fish habitat downstream or to the other inter tidal streams in the vicinity have been provided.	Consideration of potential effects associated with the proposed extension of the Constructed Groundwater-fed channel are discussed in the Surface Water Resources chapter (5.5.5.1.2.1) as well as in the Fisheries and Freshwater Habitat chapter (5.1.5.2.2).	A reference to the assessment provided in the Surface Water Resources Chapter and the Fisheries and Freshwater Habitat Chapter will be provided. An assessment of the specific effects associated with the construction and operation of the channel extension, on the downstream habitat and other intertidal streams will be added to the offsetting plan.
441	Derochers, Dale	Fisheries and Oceans Canada	10-Jun-15	Habitat Offset Plan (20May2015)	DFO-019	No rationalization as to why or how the extension of the existing enhancement channel will increase fish productivity.	Section 5.1.5.2.2. of the Fisheries and Freshwater Habitat chapter indicates that the extension of lower Constructed Ground Water Channel will lead to a substantial increase in the amount of wetted area (Section 5.5 Table 5.5-12) and fish habitat within the lower segment of the Constructed Groundwater Channel. The habitat created is expected to provide suitable conditions for rearing Coho juveniles and all age classes of Cutthroat Trout. The assessment also identified evidence to suggest rearing habitat for juvenile Coho may be limited in the McNab system.	A reference to the assessment provided in the Fisheries and Freshwater Habitat Chapter will be added to the offsetting plan.
442	Derochers, Dale	Fisheries and Oceans Canada	10-Jun-15	Habitat Offset Plan (20May2015)	DFO-020	No discussion on constructability challenges that may be encountered and how these challenges will be addressed has been included.	Table 5.1-7 in the Fisheries and Freshwater Habitat Chapter lists construction challenges and how they can be mitigated. This table will be expanded to include construction of the offsetting habitat. Construction of the groundwater-fed channel extension will be completed prior to connection with the existing channel. This will reduce the risk of impacts to the downstream habitat.	A reference to the assessment provided in the Fisheries and Freshwater Habitat Chapter will be added to the offsetting plan. A brief description of the proposed sequence of construction will be added to the offsetting plan.
443	Derochers, Dale	Fisheries and Oceans Canada	10-Jun-15	Habitat Offset Plan (20May2015)	DFO-021	Design and placement of the proposed offsetting measures appears dissimilar to the natural features in the area which may pose challenges to the habitat quality and functionality of the created habitat.	The terrain in the area of the proposed channel extension is relatively flat and only varies by approximately 2m in elevation. The channel extension has been designed by a qualified engineer and the design drawings will be included in the revised offsetting plan.	The engineered design plans for the channel extension will be included in the revised offsetting plan.
444	Derochers, Dale	Fisheries and Oceans Canada	10-Jun-15	Habitat Offset Plan (20May2015)	DFO-022	Success criteria and associated effectiveness monitoring criteria appears inadequate and is not linked to productivity.	Agreed objective and measurable success criteria were not included.	Objective criteria for effectiveness monitoring based on DFO science advice will be incorporated into the revised offsetting plan.
446	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-025	<ul style="list-style-type: none"> Proponent will need to submit an application for Water Licence (vs. approval). Application must consider: <ul style="list-style-type: none"> potential indicators and benchmarks to monitor the success of habitat construction and subsequent use over time; long term monitoring requirements; and adaptive management process to ensure the instream and riparian habitat function as intended. Proponent to confirm that they intend to submit a separate Water Licence Application for the pit lake dam. Proponent to clarify how the pit lake will be connected to the compensation channel (this may be included in the application for the dam but, should also be considered in this compensation project report). Has the proponent considered impacts to water quality once the pit lake is connected to the compensation channel? What are those considerations and how will potential impacts be avoided? Has the proponent considered impacts of the pit lake on McNab Creek and impacts to groundwater that might otherwise flow into McNab Creek? 	The identified information will be included in a separate Water License application. Engineered plans for the outlet structure of the pit lake will be included in the water license application and in the revised offsetting plan. Water quality has been considered and the assessment is included in the Surface Water Quality and Aquatic Health chapter (5.0). Potential effects on surface flows are considered in Surface Water Resources chapter (5.5).	No change to the offsetting plan, a separate application for a Water License is under development.
447	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-026	<ul style="list-style-type: none"> Proponent to clearly spell out the objectives of compensation plan and highlight the relevance of each habitat value to FLNR vs DFO. FLNR objective is to preserve aquatic habitat values including but not limited to, cutthroat trout, stream health, and functional riparian area. DFO objectives will be related to chum and coho habitat. Proponent to clarify reporting requirements to FLNRO (not MOE, unless MOE has additional reporting requirements for the compensation channel) and DFO. This Habitat Offset Plan should outline a list of all applicable authorizations required for this work and indicate when they will be submitting their applications such that there is appropriate time for full agency review. Long term monitoring of compensation effectiveness will be considered as a condition of the Water Licence to ensure compensation habitat is and remains functional, as originally intended. Length of monitoring program may extent up to or beyond 5 years after the pit lake is considered complete. 	<p>It is not our understanding that DFO's mandate is limited to salmon habitat.</p> <p>The offsetting plan identifies the objective of the extension of the Groundwater-fed Channel will be to provide rearing habitat for juvenile Coho Salmon and rearing habitat for all age classes of Cutthroat Trout.</p> <p>The provincial reporting requirement will be changed to FLNRO.</p> <p>The regulatory approvals required for the project and a schedule for applications will be provided separately from the offsetting plan.</p> <p>The majority of the Groundwater-fed Channel extension will be constructed 16 years prior to the completion of the pit lake. It is expected that its functionality can be demonstrated prior to the completion of the pit lake.</p>	Separate applications for a Water License and a Fisheries Act Authorization are under development.

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448	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-027	<ul style="list-style-type: none"> What is the habitat baseline that compensation is being proposed for? What was the original habitat balance ratio proposed? Did the upper groundwater channel satisfy those compensation requirements? If not, what were the limiting factors (e.g., spawning habitat) and how does the new proposed compensation channel resolve those limitations? Will this location be able to resolve limiting factors? Has the proponent considered offsite alternatives that might better address limiting factors? 	<p>The Freshwater Fish and Fish Habitat assessment chapter discusses the habitat values provided by the upper section of the constructed groundwater-fed channel.</p> <p>DFO has indicated in a 2010 letter that the original compensation was functioning as intended. It is our understanding that the original authorization file has been closed.</p> <p>The habitat conditions within the upper section of the Constructed Groundwater-fed channel are described in the Freshwater Fish and Fish Habitat chapter (5.1.5.2.2). The steep unconsolidated banks and ongoing erosion were identified as factors reducing the functionality of the upper channel as spawning habitat.</p> <p>The proposed location for the new channel extension will require less excavation, based on the groundwater elevation in the area. The new channel extension will have lower banks than the upper channel. The new banks are expected to be similar to the lower section of the existing channel. Revegetation has been successful along the existing lower section of the channel.</p> <p>Alternative offsetting options have been considered and were determined to be less viable.</p>	No changes to the offsetting plan.
449	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-028	<ul style="list-style-type: none"> There is no mention in the Golder Associates report of the wetlands and ephemeral water courses in the area under which gravel storage is planned (Figures 1 through 3). What environmental assessment and monitoring is to take place here to ensure no adverse effects occur from the infill at this location, or to ensure that no rare/endangered species occur at this site? Is this contained in some other report on the project? 	The habitat offsetting plan was intended to address habitat offsetting requirements associated with fisheries resources. The effects on wetland habitat are discussed in the Wildlife and Terrestrial Habitat chapter (5.3). The ephemeral watercourses are described and discussed in the Freshwater Fish and Fish Habitat chapter (5.1)	No change to habitat offset plan.
450	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-029	<ul style="list-style-type: none"> Note from FLNR Groundwater Section: The term groundwater channel is not technically correct; constructed groundwater-fed channel or man-made gaining stream is more appropriate. 	Acknowledged.	The wording of the offsetting plan has been revised to reflect this terminology.
451	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-030	<p>Groundwater modelling:</p> <ol style="list-style-type: none"> Further explanation of "groundwater modeling" should be provided to understand the assumptions made regarding subsequent implications to surface water flow. Specifically, how were the "slight increases in flow and wetted area for all natural channels during operation and following closure of the Project" estimated? Why will there be slight increases in flow and wetted area for all natural channels during operation and following closure of the project? 	The Surface Water Resources chapter (5.5) and the Groundwater Resources chapter (5.6) describe the methods used for predicting groundwater and surface water changes associated with the project.	A reference to each of these chapters will be included in the habitat offset plan.
452	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-031	<p>Design alternatives:</p> <ul style="list-style-type: none"> What "design alternatives" were considered to avoid the Project's effects on aquatic environment? Why were these alternatives removed from consideration? FLNR will likely be applying the Environmental Mitigation Policy to this project application; under this policy the alternative options need to be clearly outlined and rational provided for how the proponent came to the preferred option. For more information on how to apply the EMP, the QEP is directed to: http://www.env.gov.bc.ca/emop/ NOTE: Section 5.2 indicates different habitat offset options have been considered in conversation with DFO (2011). 	The Freshwater Fish and Fish Habitat chapter (5.1), discusses design alternatives and mitigation measures that have been identified to reduce effects on the aquatic environment. The location of the proposed pit and pit lake was determined by the location of the sand and gravel deposits. The Surface Water Resources chapter (5.5) discussed how management of the pit lake elevation will mitigate groundwater effects on the other watercourses in the area.	No change to habitat offset plan.
453	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-032	<p>Table 1:</p> <ol style="list-style-type: none"> How was instream habitat area calculated? What is the length of the upper segment of the groundwater channel proposed for removal? How was the flow reduction (as presented in square meters) calculated? How was riparian habitat estimated? Unclear what assumptions were made to come up with the above estimates. 	<ol style="list-style-type: none"> The methods for describing and quantifying existing habitat conditions are included in section 5.1.3.2.4 of the Freshwater Fish and Fish Habitat chapter and in the Fish Habitat Baseline Report presented in Appendix 5.1-A. The upper section of the Constructed Groundwater-fed Channel consists of a straight, excavated channel flowing from north to south for approximately 520 m through the area of the proposed pit. The methods for modelling flows and predicted changes in wetted area are outline in the Surface Water Resources chapter (5.5.3.3.1). see response to (1) above. The assumptions used for estimates are provided in the methods sections identified above. 	References to the identified sections will be added to the habitat offset plan.
454	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-033	<p>Original Compensation Plan Objective:</p> <ul style="list-style-type: none"> "the constructed channel was to provide spawning and rearing habitat for chum and coho salmon." Based on the minimal analyses conducted, does not appear that the compensation channel met the original objective. Did that channel have the potential to meet objective? If not, what were the limiting factors? 	See response to Item Ref FLNRO-027.	No change to habitat offset plan.
455	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-034	<p>Channel slope instability:</p> <ul style="list-style-type: none"> Were the steep unstable slopes and resulting erosion and deposition of fines and sands ever discussed in the original DFO compensation agreement? Channel stability will need to be maintained and proved effective if new compensation channel is constructed for this project 	See response to Item Ref FLNRO-027.	No change to habitat offset plan.

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456	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-035	Beaver dam (temporary barrier to fish passage): • How long has this obstruction been in place? Is it ever over-topped by flows that allow fish passage? • What are the implications / what is the relevance to the 'case' trying to be built on this compensation channel? No further explanation was provided...	The Beaver dam is recent within the last 2-3 years. Fish are above the dam so it is assumed that access is possible. The beaver dam was only identified as a potential barrier that maintenance could be necessary. The potential need for maintenance does speak to the future viability of the existing upper segment of the groundwater-fed channel. It is unclear who would be responsible for conducting this maintenance.	No change to habitat offset plan.
457	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-036	Culvert: • Was the culvert itself ever a barrier to fish passage? Again, no further reference is made to the culvert – only used as a placeholder for spatial orientation of the project.	The culvert is not part of the current project so its functionality has not been assessed. However, the existing culvert is located in a low gradient and low velocity portion of the channel and the culvert appears to be embedded deeply enough and allow adequate depth for both juvenile and adult passage.	No change to habitat offset plan.
458	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-037	Lower Section: • What is the distance of the channel that is tidally influenced? • What is the substrate of this section?	2.3.1 of Habitat Offset plan indicates that all of the lower channel is tidally influenced through backwatering and approximately 100m of the existing channel experiences saltwater intrusion. Most of the lower section of the channel has a fine sediment substrate.	No change to habitat offset plan.
459	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-038	Infrequent observations of adult chum and coho spawners in upper segment of groundwater channel: • What was the timing and frequency of Hatfield surveys in 2005 and 2009? • The Hatfield 2005 & 2009 studies should be provided as an appendix for review. Do these reports include estimates of juvenile Coho abundance or density as recorded from 2005 and 2009 studies? (Note: this report only provides coho density from 1997 DFO survey)? • Any indication that infrequent use could be linked to beaver dam or culvert as partial barriers to fish passage?	The Hatfield annual monitoring reports (2004 - 2009) will be provided with the permission of Howe Sound Pulp and Paper Limited Partnership as the reports were originally commissioned for them. The use of the term infrequent had to do with the frequency of the observations rather than fish presence. The beaver dam is unlikely to have influenced access during the period covered by the reports.	Hatfield monitoring reports will be provided separately from the habitat offsetting plan.
460	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-039	Low densities of coho fry and smolts: • What is relevance of comparing constructed groundwater channels that are part of larger freshwater systems where natural spawning and rearing occurs with this one, which is separated from areas where coho fry produced by marine waters? What was coho fry/smolt density in McNab Creek and how did it compare with mainstem coho fry/smolt densities in studies cited?	The comparisons were made to provide context regarding relative levels of productivity. More detailed information regarding fish density is provided in the Freshwater Fish and Fish Habitat chapter and in the Fish Habitat Baseline Report presented in Appendix 5.1-A. (3.2.1.1)	No change to habitat offset plan.
461	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-040	Low value chum habitat: 1) This should be an assessment of suitability for chum spawning, not fry rearing. If chum do not spawn there, fry will not be present, as they move directly into the marine environment as fry and do not move from freshwater system to freshwater system as juveniles (unlike coho and cutthroat). • The 'finding' of low chum habitat indicates that the upper compensation channel did not meet the objectives of the DFO compensation agreement. But, no links or rationale provided as to why this happened. • If only sampled twice (once per year) – explain the rationale for declined use by chum. Were surveys sufficient to draw such a conclusion? • How did chum salmon use of the compensation channel correlate with regional chum salmon escapements? • Did the culvert or beaver dam contribute barriers that could have influenced low habitat use? What other factors might have contributed to low use? Based on objective in 2.1 – will chum spawning habitat be considered again in the newly proposed lower habitat offset area? If yes, how is the QEP suggesting they learned from past challenges to implement a more successful compensation project? If not, explain rationale for why it should be removed as a valued component.	Agreed, the assessment should focus on Chum Salmon spawning. Chum Salmon fry are unlikely to be present if no spawning occurs in the system. See response to Item Ref FLNRO-027. Freshwater Fish and Fish Habitat chapter and in the Fish Habitat Baseline Report presented in Appendix 5.1-A. (2.3.4) describes spawner surveys conducted. In Table 8 of the baseline report spawner returns to McNab Creek and the groundwater fed channel are compared. It is possible that the culvert or beaver dam may have influenced habitat use by adult Chum Salmon however the lack of suitable substrate for spawning may be a more likely explanation. The offset plan is designed to address habitat impacts on the current baseline condition. The upper segment of the groundwater-fed channel appears to currently be providing rearing habitat for juvenile Coho Salmon and all age classes of Cutthroat Trout. The design uses the existing lower section of the groundwater-fed channel as a template because this section of the channel appears to be stable and provides suitable habitat.	A reference to the appropriate section of the Fish Habitat Baseline Report will be added to the Habitat Offset Plan.
462	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-041	Cutthroat trout habitat: • Present in low numbers; 0.116 fish/m2 in most abundant area. What was overall average density? • Were the cited densities in Watercourse #5 and Harlequin Creek averages or at high density locations? • This is the first mention of cutthroat as they were not indicated as an objective of the compensation project. • Unclear why they were not originally included as a value however, they should be considered moving forward. • Again, this suggests that this compensation channel was not functioning as originally intended.	A more complete description of Cutthroat Trout abundance and sampling methods is provided in section 3.2.1 of the Fish and Fish Habitat Baseline Report. The maximum densities reported correspond to identified sampling locations in each section of channel. The section referred to provides a biological description of the habitat that would be impacted by the proposed Project. It is correct that the original compensation project did not have Cutthroat Trout habitat as an objective. Agreed, Cutthroat Trout will be included in the objectives of the current plan.	A reference to the appropriate section of the Fish Habitat Baseline Report will be added to the Habitat Offset Plan.
463	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-042	Summary: All aspects of this section 2.4.1 indicate that the original compensation channel was not functioning as originally intended to offset the impacts of the previous project. In particular, a lack of suitable spawning habitat OR lack of access to this potentially suitable spawning habitat for salmonids (including trout) led to a lack of chum utilization.	Agreed	No change to habitat offset plan.
464	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-043	Objective: Again, need to clearly state the objective of this habitat compensation plan. What habitat (fish) values are being proposed for consideration? What are target species are selected and why?	Section 5.1 of the offset plan provides rationale for the proposed offset plan and describes what species and life stages are targeted.	No change to habitat offset plan.

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465	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-044	<p>Pit Lake:</p> <ul style="list-style-type: none"> Please include a description of the "outlet of the pit lake" When and how will this outlet be constructed? What guidelines will be used to ensure water quality is acceptable for connection to the channel? How will sediment from operations in the pit lake be controlled to prevent its large scale introduction into the manmade channel, should water additions from the lake prove necessary? Figure 7: update to include the "Final Pit Lake Outline" on the map (visuals used did not clearly indicate the Lake or Outlet location) 	<p>The design of the outlet structure for the pit lake has been added to the figures for the offset plan.</p> <p>The outlet could be constructed anytime during the 16 years of operation for the Project but, the outlet will not be used until operations have concluded.</p> <p>The Surface Water Quality and Aquatic Health section of the Surface Water Resources chapter (5.5) describes the predicted surface water quality.</p> <p>No surface flow will leave the pit lake during operations so no water from the pit lake could enter the channel extension during operations.</p> <p>Figure 7 will be revised to show the outlet location relative to the pit lake.</p>	A figure showing the outlet design and location will be added to the offset plan.
466	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-045	<p>Tidal backwatering:</p> <ul style="list-style-type: none"> Provide detail on the implications of tidal backwatering effects? How could this contribute to the success or challenges in meeting the objectives of this constructed fish habitat? What will be done to reduce water heating as a result of tidal backwatering? 	<p>The design for the extension of the groundwater-fed channel is similar to the existing lower section of the groundwater-fed channel and the objective is to provide similar habitat conditions. The existing channel provides conditions suitable for juvenile Coho and all life stages of Cutthroat Trout. Depth and velocity will fluctuate with the tide however, this occurs in the existing channel.</p> <p>The lower banks of the proposed channel extension and riparian planting should provide canopy cover similar to the existing lower channel. The shade provided is expected to address solar heating associated with increased wetted area and residence time caused by tidal backwatering.</p>	The riparian planting and dense canopy cover to reduce heating will be noted in the offset plan.
467	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-046	<p>Channel design:</p> <ol style="list-style-type: none"> "the design of the channel extension will use the configuration of the existing lower segment of constructed channel" Section 2.4.1 described the lower reach as having lower juvenile coho density than a number of similar reaches in the nearby vicinity. This likely indicates non-ideal habitat conditions or some other limiting factor. Note: the data used to make this determination was collected over 5 years ago. Provide updated information on the status of current habitat use in the lower channel. If the existing lower habitat is not being fully utilized, what are the potential underlying causes? If the proponent is recommending more of this same kind of habitat to be constructed, it is imperative that we understand what has been done previously that was successful vs. unsuccessful. Are you building the correct habitat features to successfully achieve your objective? Before you can truly answer this question, objective needs to be outlined. Then identify science-based targets to measure the success of your compensation. E.g., construct riffle/run, pool habitat to provide rearing habitat for coho; measure abundance; objective being to have abundance reach regional benchmark. If objective is not achieved, collect information to determine why fish are not using the area... Food for fish – was invertebrate sampling considered in the proposed constructed channel? If not, explain rationale. 	<ol style="list-style-type: none"> Agreed Section 2.4.1 is describing the upper section of the groundwater-fed channel not the lower section. Again the description was for the upper section of the channel. The objective is to construct juvenile Coho Salmon habitat that is similar in function to the existing lower channel. An objective measure of success would be if juvenile Coho are found to be using the offset habitat in abundances that are similar to the existing channel. Invertebrate sampling following the CABIN protocol was conducted in the existing channels and this monitoring will be repeated once the channel extension is created. 	Additional information regarding the monitoring of fish use and invertebrates will be added to the offset plan.
468	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-047	<p>Channel depth & width:</p> <ol style="list-style-type: none"> Proposed average wetted width of 5 meters and average depth of 30cm. Have you considered potential saltwater intrusion issues? Will the groundwater well be a permanent component of the project? If so, have you considered the impacts that pumping may have on the saltwater/freshwater interface? How will minimal flows be maintained during critical seasons? Has consideration been given to potential water level fluctuations? (e.g., due to combination of seasonality and tides – particularly if channel sediments are super permeable and water level is mainly tied to the groundwater table vs runoff) The upper groundwater channel proved to have many issues with channel stability. How will these issues be avoided in the new proposed channel? Note: section 5.1 provides some additional detail on re-vegetation... this information should also be mentioned in section 5.0... 	<ol style="list-style-type: none"> Correct Yes and saltwater intrusion only occurs approximately 100m into the existing channel. The groundwater well will only remain in place long enough to support the design of the channel extension. The volumes of water pumped from the well very small, less than 10 liters and are not likely to effect groundwater flow. Groundwater flow has been modeled and control of the pit lake elevation has been adjusted to provide additional groundwater flow below the pit lake. The new channel extension will have lower banks and the banks will be planted with riparian vegetation. 	Riparian planting will be added section 5.0 of the Habitat Offset Plan as a component of the habitat enhancement.
469	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-048	<p>Off-channel ponds:</p> <ul style="list-style-type: none"> What will be done to ensure connectivity of off-channel ponds with constructed channel, and to prevent in-filling with sediment? 	<p>The off channel ponds that are connected to the channel, are designed with a high flow outlet to promote sediment flushing. Sediment levels will be monitored and once operational the pit lake outlet can be used to release flushing flows if necessary. Sediment particle analysis has been done to determine appropriate flow levels necessary to promote bedload movement and the outlet structure has been designed to allow flow releases that will be large enough.</p>	No change to habitat offset plan.
470	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-049	<p>Objective:</p> <ul style="list-style-type: none"> Again, clarify objectives of the compensation project. Are cutthroat trout and coho going to be considered a target species ("value") considered here? What about chum spawning habitat? 	<p>Yes, Coho Salmon and Cutthroat Trout are considered the target species for the habitat offset. The plan does not include habitat for Chum Salmon.</p>	No change to habitat offset plan.

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471	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-050	Productive capacity: <ul style="list-style-type: none"> “The fish habitat created ... is expected to fully offset the losses in productive capacity associated with Project impacts” – clarify how productive capacity is quantified? Area-based only? Table 1 & 2: indicates that 3,307m2 instream habitat will be lost and replaced with 3,808m2 instream habitat. The remainder of the gains are recommended via riparian habitat. How does this relate to productive capacity of the stream? 	Habitat area by type and quality has regularly been used as a surrogate to define habitat productive capacity. DFO's new policy relies of productivity rather than productive capacity but accepted tools for measuring productivity are still under development. The gain in riparian habitat is expected to support more stable stream banks and increased canopy cover that will promote greater habitat suitability. Riparian habitat supports instream habitat conditions such as water quality, temperature, leaf litter and invertebrate food supply.	No change to habitat offset plan.
472	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-051	Potential for success: statement about existing channel success is overly optimistic, and at odds with previous descriptions of fish utilization and density... Construction schedule: <ul style="list-style-type: none"> Will need to be clarified when applying for Water Licence. Specifically, <ul style="list-style-type: none"> Timing for channel deconstruction and Timing for connecting new constructed channel to existing watercourse. 	See response to Item Ref FLNRO-046. Thank you for providing information regarding the requirements for the Water Licence application. This information will be included in the application submission.	No change to habitat offset plan.
473	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-052	Pit lake: <ul style="list-style-type: none"> Again, the reference to the “pit lake outlet” is not clear. What where will the outlet be located? How will the risk of releasing sediment-laden water be reduced throughout the life of the compensation channel (perhaps this will become more obvious with further explanation of the outlet from pit lake)? Riparian Areas Regulation (RAR): <ul style="list-style-type: none"> Note: the proposed extension to the channel is located on property owned by BURNCO. QEP to clarify if the new channel location will impose RAR considerations on neighboring land owners. E.g., are all neighboring properties greater than 30 meters from the high water mark of the proposed channel and pit lake? Will need to see an ongoing commitment to protect the full extent of compensation channel and riparian area – perhaps in the form of a covenant and/or condition of Water Licence? 	Please see response to Item Ref FLNRO-044. The proposed channel extension is located on land owned by the proponent and there will not be any other land owners located within 30 m of the high water mark of the channel extension. Thank you for providing information regarding the requirements for the Water Licence application. This information will be included in the application submission.	No change to habitat offset plan.
474	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-053	All works proposed seem to generally fall within recommended BMPs. Again, details will need to be provided when submitting Application for Water Licence. Some additional considerations: <ul style="list-style-type: none"> What about use of heavy equipment adapted for working around streams (e.g. biodegradable hydraulic fluid, etc.)? Sediment control “system will be removed in a manner that prevents the escape or re-suspension of sediments”. Perhaps more apt to suggest minimizing re-suspension of sediments are taking mitigative measures to flush it from the system. There is mention of environmental monitoring, but no discussion about submission of or adherence to any Construction Environmental Monitoring Plan, nor is there discussion re. reporting to the Province (FLNRO) on a regular basis. (There is mention of reporting to MoE in next section, but it should be here as well, together with reference to CEMP, if such is relevant). No specific mention of fish “rescue” from areas behind dam which will become part of the pit lake. 	Thank you for providing these recommendations regarding mitigation and monitoring. Yes an environmental management plan will be developed and provided to DFO and FLNRO for review prior to construction of the offset habitat. Fish salvage will be included in the environmental management plan that will be developed for the construction of the berm and pit lake.	The habitat offset plan will identify that an environmental management plan will be developed for review by DFO and FLNRO prior to the beginning of construction..
475	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-054	Requires extra bullet regarding monitoring of upper channel decommissioning to ensure no harm is caused downstream... see comments from Section 6.0 above.	Agreed, however the monitoring of activities associated with project construction will be documented separately from the habitat offset plan.	The habitat offset plan will identify that a separate environmental management plan for project construction will be developed for review by DFO and FLNRO prior to the beginning of construction..
476	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-055	Monitoring schedule will need to be clarified and reporting deadlines set. This will likely be a condition of Water Licence / EAO condition / DFO approval... Commitments must be made to collect meaningful metrics to measure the success of channel construction. Again, objectives are required to be stated up front. “reports will be provided to DFO and MOE” – clarify which group in MOE reports would be submitted to? Or was this intended to say FLNR? Monitoring reports will be part of FLNR-issued water license.	Thank you for the information regarding monitoring conditions that are likely to be included in the Water Licence. Agreed, objective measures to determine the success of the offset habitat will be developed in consultation with DFO and FLNRO. Monitoring reports will be provided to DFO and FLNRO.	The habitat offsetting plan will be adjusted to include more detail regarding monitoring schedule and reporting requirements based on input from DFO and FLNRO.
477	Smith, Malissa Rosenboom, Remko Harrower, Bill	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	10-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-056	Include the monitoring and reporting schedule for both: 1) Construction Environmental Monitoring and 2) Habitat Offset Monitoring Provide window for connection of new and existing channels to minimize effects on fish already residing in channel.	Thank you for the information regarding monitoring and reporting. The current plan is to fully construct the channel extension and give it time to stabilize prior to making connection with the existing channel. The connection will be made during the fisheries reduced risk window (July 15 - August 15).	A monitoring and reporting schedule will be added to the habitat offset plan. Details on the timing of the connection with the existing channel will be added to the habitat offset plan.
478	Smith, Malissa	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	23-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-057	There was no discussion of infilling of the wetlands to the southwest of the project near the shore for gravel storage – it may or may not be fish habitat, but might contribute to fish habitat or act as habitat for other organisms of interest – frogs., turtles, etc. A clear description of that portion of the project should have been provided.	This issue is discussed in the Wildlife and Wildlife Habitat Chapter.	Amphibian breeding ponds will be included in the offsetting plan but the area will not be included in the habitat balance calculation.

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479	Smith, Malissa	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	23-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-058	What is the plan for the lake once the operation is concluded? I imagine it will be abandoned, but, will it first be remediated to become suitable habitat for aquatic life – e.g. contouring shorelines and near-shore depths, planting vegetation, introducing aquatic plants, etc. A clear decommissioning plan should be in place.	The pit will remain flooded and the water level will be maintained at a controlled elevation which will avoid groundwater loss from McNab Creek and provide increased ground water into waterways downslope of the pit lake.	No change to the offsetting plan, this information will be included in the project description section of the application.
480	Inouye, Kevin	Canadian Environmental Assessment Agency	23-Jun-15	Habitat Offset Plan (20May2015)	CEAA-033	Section 2.2 (Predicted Residual Effects) identifies reduction of flow and wetted area in the lower segment of the constructed groundwater channel as a residual habitat impact; however, this effect is not included in Table 1 (Summary of Habitat Area Affected by the Project). This impact should be included in Table 1, as downstream impacts will need to be considered.	This is included in Table 1 as 116m ² reduction in average wetted area (prior to offsetting) under the flow reduction column.	No change to the offsetting plan
481	Smith, Malissa	Ministry of Natural Resource Operations (FLNRO), South Coast Region Authorizations (Water Allocation)	24-Jun-15	Habitat Offset Plan (20May2015)	FLNRO-059	To clarify, Remko and I have further discussed the requirement for a Water Act Licence vs. Approval (Section 9) and maintain that a Licence is still the preferred approach here given the nature and timeframe of the works proposed. In my review I mentioned that two separate Water Licences should be applied for however, after further discussion, we believe that only one Licence application is necessary if all of the works remain on the same parcel of private land owned by the Proponent. The application for a Conditional Water Licence would include the dam, spillway, compensation channel, and any other works that involve the use or diversion of water. Whereby “use” includes the use of water for conservation purposes (i.e., the compensation channel). All of the questions and requests for information provided in our first round of review comments will be required for the review Water Act licence application. The habitat offsetting plan is to be an appendix to the water licence application. Additional information and procedures for the Reservoir will also be required in accordance with the Dam Safety Regulation.	Acknowledged.	None proposed.
482	Gall, Chris	Métis Nation BC	18-Nov-15	Part C Baseline (17Nov2017)	MET-001	Thanks so much for contacting us Sandra. When would you be looking for additional information by? The next three weeks, I have a significant amount of work on my plate and am wondering if late December would be acceptable.	We are trying to complete the effects assessment in the next couple of weeks. I realize it is short notice but if you could provide something sooner, we would appreciate it. Please let me know if you'd like to discuss further. I'd be happy to give you a call.	n/a
483	Sauder, Ruth	Penelekut Tribe	30-Nov-15	Part C Baseline (17Nov2017)	PEN-001	This is without a doubt the strangest referral documentation I have ever seen. I will assume that Burnco is some sort of gravel/aggregate company, but other than that I am utterly unaware of who you are, or what the referral is that is being referenced. Please advise where you accessed the information that you're relying on with respect to this community. Unless it was provided to Burnco or Golder by Penelakut then it is NOT appropriate for them to utilize this information in any way. If I am mistaken I apologize, but I don't believe I've ever had any contact of any sort from anyone about this referral until receiving this info. from you today. I will look at the provincial EAO website in an attempt to garner more information about this project. But for the time being I think you should consider yourself as having NOT YET consulted with this FN in any way. I will be in touch again when I have done some reading. I've now made an attempt to look at your project at the BC EAO website and was not able to access anything. As a starting point could you please email me the link to your project details and that way I should be able to simply click on the link to get in.	Thank you for your response. I understand how this referral may have been confusing for you. The Canadian Environmental Assessment Agency (the Agency) has previously communicated with the Penelakut Tribe with respect to the BURNCO Aggregate Project, most recently on December 17, 2014 when the Agency provided the Approved EAC Application Information Requirements/EIS Guidelines. The Agency has held the primary responsibility with respect to consultation on this Project and procedural aspects have not been delegated to BURNCO. BURNCO is required to provide materials to First Nations for review and comment before submitting the EAC Application for review. We have provided the documents in our previous email for these purposes. By providing information at this stage we hope to more accurately reflect the views of the Penelakut Tribe in the assessment process. The link to Project information on the BCEAO website is here: http://a100.gov.bc.ca/appsdata/epic/html/deploy/epic_project_home_355.html We have copied the Kevin Inouye, Project Manager at the Agency so you may follow up on prior communications if you wish. I hope this helps. Please let me know if you require any further information or assistance.	None proposed.
484	Sauder, Ruth	Penelekut Tribe	1-Dec-15	Part C Baseline (17Nov2017)	PEN-002	Are you able to provide me with a GPS point or a google screen shot of where this proposed gravel pit is located? That would possibly simplify the process. However, I'm still very concerned that someone who has never, ever spoken to anyone at Penelakut is seeking to submit information as part of the EAO process that purports to be a representation of Penelakut TUS in the area. That can't happen.	Please find a location map attached. The Project is located on the western shore of Howe Sound in the lower McNab Creek Valley, approximately 22 km west-southwest of Squamish and 35 km northwest of Vancouver. Geographic coordinates are 49° 34' 00" N; 123° 23' 20". The previously attached traditional land and resource use information is a desktop study only taken from publicly available sources such as published environmental assessment reports and ethnographic studies. We would be pleased to receive any additional information or comments you wish us to consider in the assessment.	n/a

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485	Sauder, Ruth	Penelekut Tribe	1-Dec-15	Part C Baseline (17Nov2017)	PEN-003	<p>You can't simply take our materials that we have provided in other contexts and plunk them into your process. We don't even have a way of verifying what is your source for this information or whether it is accurate. If you want to rely upon Penelakut information about our Traditional Uses then you or the proponent should be engaged in a consultation with this FN. You do NOT have Penelakut's permission to simply cobble together info. you've obtained from who knows where and claim it is somehow representative of Penelakut TUS. If you consider yourself a professional then I can't believe that you consider this an acceptable approach. There has NOT been any consultation with Penelakut on this project by you or the proponent and you cannot simply use materials that may or may not be accurate as part of your process without our input or Permission. Nor does this FN have the capacity to review projects for CEEA and Burnco without the dollars to hire someone to do that work. Be advised that we have NOT been consulted on this project nor have we been engaged at any level in this process. This is nothing more than the worst type of cultural appropriation without compensation or consultation. It doesn't rise to the level of consultation of any sort, let alone 'meaningful' consultation. You need to take Penelakut information not provided by Penelakut out of your materials. It is nothing more than hearsay.</p> <p>Quit trying to turn consultation into a bureaucratic process that works only for the bureaucrats and the proponents, and start recognizing that the primary premise of any type of consultation protocol is that it be for the benefit of the affected FNs. You're destroying the consultation process with this type of cynical, meaningless, and sloppy work, and in fact it only gives us more work to do with insufficient resources to do it, with not even minimal compensation for the time it takes to deal with you. Your process is only a burden to our community and will not result in any sort of s.35 protection of our asserted rights or title.</p>	None provided.	n/a
486	Sauder, Ruth	Penelekut Tribe	12-Jan-16	Part C Baseline (17Nov2017)	PEN-004	<p>As you've already been told once, you don't get to simply find Penelakut use info. in the public domain and then cut and paste it into your process and call it consultation. Any information that is out there is owned by Penelakut and you do not have the right to publish it or use it without our permission. Nor do you know the source of what you've accessed, and nor do you know that it is in fact correct Penelakut information. Nor is it likely to contain the most up-to-date current use information.</p> <p>For the final time, we have not been consulted on this project, and I am giving you specific instructions that you may NOT use information that you gathered about Penelakut without Penelakut engagement for the purposes of this or any consultation.</p> <p>Any information which you've attached to this email has not been reviewed by Penelakut, and may not be relied upon or used by you or anyone without Penelakut permission in this or any consultation.</p> <p>Stop doing what is convenient for you, and start following proper consultation processes.</p> <p>And I am really appalled that you chose to send this email yesterday to my Chief without copying me, given my previous email to you on this matter. I query what you were trying to accomplish in doing that.</p> <p>I am directing you to attach this email to the Burnco documents to be submitted in the Environmental Review process for this project, but don't include any other documents about Penelakut not provided by Penelakut.</p>	<p>Thank you for your response. I apologize for not copying you on the original email and not referring to your earlier communications with us.</p> <p>As you note, the background and land and resource use information is based only on publicly available sources, including published environmental assessment reports, ethnographic studies and websites. We understand your concerns about the use of this information in the EAC Application/EIS. We do not consider the use of information in the public domain as consultation. Procedural aspects of consultation have not been delegated to the Proponent (BURNCO Rock Products Ltd. (BURNCO)) for this project.</p> <p>BURNCO is providing these materials for review and comment before submitting the EAC Application/EIS to the BCEAO Office and to the CEA Agency. Golder provided the documents in the previous email to Penelakut Tribe for review and input on BURNCO's behalf. By providing information at this stage we hope to more accurately reflect the views of the Penelakut Tribe in the assessment process. We would be pleased to receive any additional information or comments you wish us to consider in the assessment. Should Penelakut choose not to review the documents and provide comments, we will make notations in the relevant sections of the EAC Application/EIS stating that Penelakut Tribe has not provided information and does not support the use of publicly-available information in the Application. We will also include the content of your email in the Aboriginal Consultation section. Both the CEA Agency and BCEAO are copied on this email so they are aware of your concerns.</p>	<p>Make notations in the relevant sections of the EAC Application/EIS stating that Penelakut Tribe has not provided information and does not support the use of publicly-available information in the EAC Application/EIS.</p> <p>Include 12-Jan-2016 email content in the Aboriginal Consultation section.</p>
487	Smith, Tanya	Tsleil-Waututh Nation	19-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-029	Just a quick note to let you know this hasn't fallen off our radar. We will send comment responses by Feb 1.	Thank you. If you need any additional information, please do not hesitate to contact me.	n/a
488	George, Larry	Cowichan Tribes	21-Jan-16	Part C Baseline (17Nov2017)	CT-001	Only some members of the <i>Hwlitsum</i> people can accurately be described as having been part of the historic Cowichan Nation.	The proponent agrees to the change.	<p>Section 10.1.5, paragraph 3 has been changed to make it more specific to Cowichan Tribes:</p> <p>"Members of the Cowichan Tribes are descendants of various local groups or "tribes" within the historic Cowichan Nation (CT 2014). Currently, the term Cowichan Tribes specifically denotes those Cowichan Nation communities who trace their ancestry to local groups with winter villages on the Cowichan and Koksilah Rivers and Cowichan Bay (Cowichan Tribes n.d. a)..."</p>
489	George, Larry	Cowichan Tribes	21-Jan-16	Part C Baseline (17Nov2017)	CT-002	<i>Hwlitsum</i> is no longer affiliated in any way with the Cowichan Nation Alliance.	The proponent agrees to the change.	All references to Hwlitsum being affiliated with Cowichan Nation Alliance have been removed.
490	George, Larry	Cowichan Tribes	21-Jan-16	Part C Baseline (17Nov2017)	CT-003	In addition to intentions to re-establish a land base and river access the Cowichan Nation Alliance also plans to reestablish permanent residences as well as economic ventures and employment opportunities at the Tl'uq'tinus site (see attached [Cowichan Nation Alliance] Declaration [for Reconciliation])	The proponent agrees to the change.	<p>The following text has been added to the reference to Tl'uq'tinus in Section 11.3.2.4 Cowichan Tribes Use:</p> <p>"In correspondence sent to the Proponent in January 2016, Cowichan Tribes noted that the Cowichan Nation Alliance intends to re-establish permanent residences as well as economic ventures and employment opportunities at the Tl'uq'tinus site."</p>

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491	George, Larry	Cowichan Tribes	21-Jan-16	Part C Baseline (17Nov2017)	CT-004	Under the section "hunting/trapping", please include the Cowichan peoples also historically trapped and hunted beaver and sea otter.	The proponent agrees to the change.	The following text added to 11.3.2.4.2 Harvesting of Terrestrial Resources: "Cowichan peoples also historically trapped and hunted beaver and sea otter."
492	Sauder, Ruth	Penelekut Tribe	22-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	PEN-005	If you want us to review these materials, the standard protocol is for the proponent or their agents to enter into a 'participation' agreement with us in order that we have the capacity to respond to your request. If we can't pay people to do the work then we can't do the work. I'm assuming you and others are getting paid, so I query why anyone thinks we shouldn't be paid. Are you going to contact me about making an arrangement for consultation with this FN? Otherwise, as I said to you before, you do not have permission to utilize unsubstantiated materials you've found about Penelakut, in this process. That isn't consultation, it is reliance on hearsay. This is how mistaken assumptions about a FN get perpetuated from one project to the next, which is a problem that has happened regarding Penelakut, particularly with respect to much of the shockingly uninformed work that we have seen Golder produce in the past, and currently, with respect to other projects that we are actually reviewing and commenting on.	None provided.	n/a
493	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-030	In the section titled 'Assessment of Potential Effects on Tsleil Waututh Nation Aboriginal Rights' on page 9, Tsleil-Waututh requests that the following statement is added: "Part C and this EAC Application does not, in any way, abrogate or derogate from any Aboriginal, treaty, title or other rights or freedoms that pertain to Aboriginal peoples."	The proponent agrees to add the suggested statement.	The statement has been added to the beginning of Section 11.3 Assessment of Potential Effects on Tsleil-Waututh Nation and other Aboriginal Groups.
494	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-031	Tsleil-Waututh requires that all references to the Tsleil-Waututh "traditional territory" boundary are changed to the Tsleil-Waututh "consultation area," as consistent with Tsleil-Waututh Nation's Stewardship Policy. There is a difference between what we consider our traditional and consultation area boundaries and we are happy to provide clarification at our next meeting. (This comment also pertains to similar wording used within the Consultation Report.)	The proponent agrees to the change.	The requested change has been made.
495	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-032	Tsleil-Waututh is deeply concerned that marine shipping is excluded from the assessment. Increases in marine shipping in Howe Sound, Burrard Inlet and the Fraser River are of profound concern to Tsleil-Waututh Nation as described in Morin (2015: 395-405). Until this component is added into the application, consultation and the assessment of impacts to our rights, title and interests are incomplete.	On October 4, 2013, BURNCO provided CEA Agency with information on the incremental effects of barging from the sand and gravel pit site at McNab Creek to BURNCO's existing load-out facilities in Burnaby and Langley, B.C. BURNCO's analysis of the incremental changes to existing barge traffic indicated that there would be: <ul style="list-style-type: none"> • 0% net change from south of Passage Island, along the Strait of Georgia, to the North and South Arms of the Fraser River, and • 0% net change along the Fraser River to the load-out facilities in Burnaby and Langley. As a result, CEA Agency limited the scope of marine shipping for the Application to include barge traffic in Howe Sound, Ramillies Channel, Thornbrough Channel and Queen Charlotte Channel (south of Passage Island) and excluded existing shipping lanes in the Strait of Georgia and in the Fraser River to BURNCO's facilities in Burnaby and Langley.	No changes proposed regarding the exclusion of marine shipping. The Application includes Tsleil-Waututh's concern regarding marine shipping in Section 12.0 Other Aboriginal Interests and has been updated as follows: "In correspondence addressed to the BC EAO and the Proponent regarding the Proposed Project, Tsleil-Waututh Nation requested that shipping routes in the Strait of Georgia and Fraser River and all the estuaries in the region be included in the scope of the assessment. The Proponent provided in its analysis of incremental changes to existing barge traffic within the waters of Tsleil-Waututh Nation's consultation area as a result of the Proposed Project, which confirmed the exclusion of the Strait of Georgia and Fraser River from the effects assessment." The comments will also be added to the Consultation Summary.
496	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-033	It is not appropriate for the following document be used and cited as it is under internal review at the Ministry of the Attorney General given gross inadequacies: "TWN: A Review of historic and ethnographic references". Please remove all references to the document in-text and works cited.	Based on comment number TWN-07, the Proponent assumes that Tsleil-Waututh is referring to the EAO 2010 (Environmental Assessment Office's <i>Evergreen Line Rapid Transit Project Assessment Report</i> , December 2010.).	The following reference and all citations have been deleted from the Application: Environmental Assessment Office's Evergreen Line Rapid Transit Project Assessment Report, December 2010.
497	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-034	Morin (2015) report is cited in the body of the document but excluded from the list of references. Wwe expect that this be corrected in the reference list.	The Proponent agrees.	The following reference has been added to the document: Morin, Jesse. 2015. Tsleil-Waututh Nation's History, Culture and Aboriginal Interests in Eastern Burrard Inlet. Redacted version available at: http://twnsacredtrust.ca/wp-content/uploads/2015/05/Morin-Expert-Report-PUBLIC-VERSION-sm.pdf . Accessed January 2016.
498	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-035	The majority of mitigation measures are highly focused on more consultation activities with Tsleil-Waututh. We encourage strong consultation and engagement of our Nation; however, we would like to see more detailed and pointed suggestions for mitigation of impacts proposed by BURNCO. We will work with BURNCO to refine these suggestions as needed.	The Proponent looks forward to working with Tsleil-Waututh on refining the suggested mitigation activities outlined in the Application.	No changes proposed.
499	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-036	Regarding Tsleil-Waututh's occupation of IR#3 (p.5), the balance of evidence indicates that TWN had inhabited the IR#3 area for millennia (at least 3000 years) prior to the historic era. See Morin (2015:198). This just one of up to 12 villages occupied by Tsleil-Waututh people prior to contact. We request that this section be updaetd accordingly. To be cleaar reference to the EAO (2010) reprot, which currentlyunder review as previously mentioned, should be replaced by the Morin (2015) report.	The Proponent has made the requested changes.	The information from EAO 2010 has been replaced with the new text provided by Tsleil Waututh Nation. The first sentences in the paragraph under the Aboriginal Regional Setting section for Tsleil-Waututh Nation (Section 10.1.2) have been updated as follows+17: "Tsleil-Waututh Nation's main community is located in North Vancouver, BC on the shore of Burrard Inlet, between Maplewood Flats and Deep Cove at Burrard Inlet Indian Reserve (IR) 3 (AANDC 2015). Evidence indicates that Tsleil-Waututh Nation had inhabited a village at the Burrard Inlet IR 3 site for millennia (at least 3000 years) prior to the historic era (Morin 2015:198) and is only one of up to 12 villages occupied by Tsleil-Waututh people prior to contact (Morin 2015)."

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500	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-037	Tsleil-Waututh is not confident that the Project will have positive effects on fish habitat. We are equally unsure of the Project impacts to salmonids (p.23, 24). We will be forwarding comments on the Fish Habitat Offset Plan accordingly. We request that BURNCO forward relevant studies, or reference appropriate sections of the Application to substantiate their conclusions in this regard.	The Proponent looks forward to receiving Tsleil-Waututh's comments on the Fish Habitat Offset Plan. Section 11.3 Assessment of Potential Effects in the EAC Application/EIS refers the reader to Sections 5.1 and 5.2 for the results of the effects assessment on salmonids.	No changes proposed.
501	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-038	Tsleil-Waututh is concerned that intangible cultural heritage will be impacted due to increased numbers of non-native people accessing the area (p. 31). We would like to see stronger mitigation and adaptation options are more clearly suggested, we will work with BURNCO to refine them.	The Proponent looks forward to working with Tsleil-Waututh on refining the suggested mitigation activities outlined in the Application.	No changes proposed.
502	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-039	It is acknowledged that the Project has a high likelihood of impact to the quality of current use experience in the area (p.46). We would like to see stronger mitigation and adaptation options identified to lessen this impact during the construction and operation phases at the very least.	Mitigation measures proposed in Marine Transport (Section 7.2), Visual Resource (Section 7.4) and Noise (Section 9.2) will be designed to minimize Project effects on use of Howe Sound and reduce the effects on the visual quality when experiencing Howe Sound. The additional consultation activities proposed as mitigation in Section 11.3.5 will focus on addressing the incremental effects on Tsleil-Waututh Nation's quality of current use experience. It is expected that stronger mitigation and adaptation options to lessen the effects on Tsleil-Waututh Nation's quality of current use experience will be identified during these consultation activities. As noted in the response to TWN-009, The Proponent looks forward to working with Tsleil-Waututh on refining the suggested mitigation activities outlined in the Application.	No changes proposed.
503	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-040	We would like to clarify that the following potential activities or communications are not to be considered part of the consultation process (inclusive of information sharing): - Communications unrelated to the Project; - Interactions with Tsleil-Waututh members or staff not identified as part of Tsleil-Waututh's consultation team; - Interactions with Tsleil-Waututh field crews; and - Any involvement with Tsleil-Waututh-owned businesses, such as Inlailwatash. Ultimately, there must be an ongoing dialogue between BURNCO and Tsleil-Waututh in which each group has enough time to consider the information provided, incorporate views, and respond to each other. To be sure, the number or type of consultation activities is less important than the substantive nature and genuine approach of each consultation activity.	Clarifications and comments have been noted.	The following text has been added to the summary of Pre-Application Consultation with Tsleil-Waututh in Section 13.1.2: "The following summary of consultation activities between Tsleil-Waututh Nation was written by the Proponent and reviewed by Tsleil-Waututh Nation. Following their review, Tsleil-Waututh Nation provided clarification that they do not consider the following activities or communications to be part of the consultation process (inclusive of information sharing): ■ Communications unrelated to the Project; ■ Interactions with Tsleil-Waututh members or staff not identified as part of Tsleil-Waututh's consultation team; ■ Interactions with Tsleil-Waututh field crews; and ■ Any involvement with Tsleil-Waututh-owned businesses, such as Inlailwatash."
504	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-041	Include a statement, indicating that BURNCO will demonstrate where they have incorporated feedback of Aboriginal Groups within all phases of the Project, and provide a rationale for instances where feedback was not incorporated.	Comments have been noted.	The following text has been added to Section 13.2 Proposed Consultation Activities During Application Review: "The Proponent will demonstrate where they have incorporated feedback of Aboriginal Groups during the review of the EAC Application/EIS, and provide a rationale for instances where feedback was not incorporated." The following text has been added to Section 13.3 Proposed Consultation Post-Environmental Assessment Certificate: "The Proponent will demonstrate where they have incorporated feedback of Aboriginal Groups within all phases of the Project, and provide a rationale for instances where feedback was not incorporated."
505	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-042	In addition, Tsleil-Waututh does not consider "sharing project information" to suffice as consultation on its own accord. Rather, it is one of the first steps to building a relationship between Aboriginal Groups and the proponent. Tsleil-Waututh request that this is clarified within the Plan. Therefore, we request: BURNCO include language in the Plan, clarifying that the provision of information to Aboriginal Groups does not constitute consultation on its own accord but is rather one step of the larger consultation process.	Comments have been noted.	The following text has been added to the end of the list of consultation activities in Section 13.2 Proposed Consultation Activities During Application Review: "The Proponent acknowledges that the provision of information to Aboriginal groups does not constitute consultation on its own accord but is rather one step of the larger consultation process."

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506	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-043	BURNCO will include a statement regarding confidentiality, such as, "Where and when formally requested, the proponent will respect Aboriginal Groups' requests to keep information confidential. Where needed, the proponent will work with Aboriginal Groups to develop suitable terms or agreements to protect confidentiality."	Comments have been noted. The Proponent will also need to ensure that it can fulfill requirements for sharing information to regulators as needed for review of the Application or in conditions included in the EAC.	<p>The following text has been added to Section 13.2 Proposed Consultation Activities During Application Review:</p> <p>"Where and when formally requested, the Proponent will respect Aboriginal groups' requests to keep information confidential. Where needed, the Proponent will work with Aboriginal groups to develop suitable terms or agreements to protect confidentiality, while ensuring that the Proponent can fulfill requirements to provide information to regulators for review of the EAC Application/EIS. The Proponent will seek approval, not just review, from the relevant Aboriginal group before sharing information with BC EAO."</p> <p>The following text has been added to Section 13.3 Proposed Consultation Post-Environmental Assessment Certificate:</p> <p>"Where and when formally requested, the Proponent will respect Aboriginal groups' requests to keep information confidential. Where needed, the Proponent will work with Aboriginal groups to develop suitable terms or agreements to protect confidentiality, while ensuring that the Proponent is able to comply with conditions of the EAC related to provision of information. The Proponent will seek approval, not just review, from the relevant Aboriginal group of information before sharing with the EAO."</p>
507	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-044	BURNCO will obtain permission from Tsleil-Waututh Nation, in writing, before posting our responses on websites or sharing otherwise (other than the BCEAO website).	Comments noted. The Proponent will discuss with Tsleil-Waututh the posting or sharing of information on a case-by-case basis.	No changes proposed.
508	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-045	BURNCO update consultation plan to reflect gaining Aboriginal Group approval, not just review, before sharing with the EAO. This will ensure that all views are reflected accurately.	Comments noted.	See response to TWN-14 for how this comment is addressed in the updated Part C.
509	Smith, Tanya	Tsleil-Waututh Nation	29-Jan-16	Part C/Pre-App Consult Report (11Jan2016)	TWN-046	Within the application review activities phase, we request that a statement be added requiring a decision-making framework be established between the proponent and Aboriginal Groups, in not Tsleil-Waututh specifically. This decision-making framework will enable consistent and fair dialogue, while facilitating any minor dispute resolution at preliminary states as necessary. Tsleil-Waututh will work with BURNCO to establish this framework.	Comments noted.	<p>The following text has been added to Section 13.2 Proposed Consultation Activities During Application Review:</p> <p>"The Proponent will seek to develop a decision-making framework for consultation meetings with <i>S̓k̓w̓x̓ wú7mesh</i> Nation and Tsleil-Waututh Nation to enable consistent and fair dialogue, while facilitating any minor dispute resolution at preliminary stages of discussions."</p>