## **MARY RIVER PROJECT**



Final Environmental Impact Statement February 2012

## **APPENDIX 1B-7**

**CONCORDANCE WITH PHC APPENDIX 3** 





	Concordance with PHC Report Appendix 3		
Item	001100110011111111111111111111111111111	FEIS Section	
	Type A Water		
1	Updated information on the potential amendment to the North Baffin Regional Land Use Plan to allow for the transportation corridor that is being considered by the Nunavut Planning Commission (NPC);	Vol 2, Sec 2.2.1 & Vol 3, App 3B, Attachment 12	
2	Supplemental information for the various types of undertakings identified in the application including hydrostatic testing, landfarm facilities and on-site storage of hydrocarbon contaminated soil;	Vol 3, App 3B, Attachment 5 - Waste Management Plan (H337697-0000-07-126- 0001) – Annex 5 No hydrostatic testing will occur due to the weather conditions on site.	
3	Information on the total quantity of water required on a daily and yearly basis for all of the project related activities combined;	Vol 3, App 3B, Executive Summary - Document Number: E337697-0000-07-236- 0001, Table 3-1.1:Key Project Facts	
4	Information on the water rights of existing and other users of water, including any existing, pending and/or potential water compensation agreement(s);	Vol 2, Sec 2.2.6 & Vol 3, App 3B, Attachment 1, Block 18	
5	Comprehensive information on financial security, bonding and reclamation costs associated with the project for all activities and/or facilities proposed;	Vol 3, App 3B, Attachment 2	
6	Proposed term (years) of the Type A licence;	25 Years; Vol 3, App 3B, Attachment 1, Block 25	
7	Application fee and fee for the right to use water;	Vol 2, Sec 2.2.4 & Vol 3, App 3B, Cover Letter, Copy of Cheque	
8	Information on reporting parameters, format and structure of Annual Reports for the project;	Vol 3, App 3B, Attachment 1 - Block 26	
9	Project location maps drawn to a scale of 1:50, 000 instead of 1:250, 000. In correspondence to BIMC, dated November 7, 2011, the NWB stated that given the immensity of the project area, the NWB will accept maps drawn to a scale that is larger than 1:50,000 only for areas within the project's boundaries for which minimal or no activities would be undertaken;	Vol 3, App 3B, Attachment 11- Maps - document number H337697-0000-07-248- 0023 all site specific maps can be found in this section	



Item		FEIS Section
10	Project summary or description that is specific to the water licence application;	Vol 3, App 3B,Executive Summary - Document Number: E337697-0000-07-236- 0001
11	Information on alternative methods or options for treatment and disposal of waste;	Vol 3, App 3B, Attachment 5 - Waste Management Plan (H337697-0000-07-126- 0001), Section 4.4.
12	Updated information on other authorizations relevant to the current and proposed activities and/or facilities; and	Vol 2, Sec 2.2.5 &Vol 3, App 3B, Exec. Summary, Table 1
13	Appropriate and more precise referencing in the water licence application and concordance table to studies and other relevant information that are required for the water licensing process.	Addressed thoughout the Type A Water Licence, Vol 3, App 3B
	Volume	2
14	Information with respect to existing and/or ongoing water compensation agreement(s) and how those agreements might be impacted by relevant proposed activities; and	Vol 2, Sec 2.2.4; currently being renegotiated within framework of IIBA
15	Updated information associated with the issuance and expiration dates of permits and authorizations relevant to the project.	Vol 2, Table 2-2.3
	Volume	3
16	Information on the quantity of sewage generated by each camp and contingency measures aimed at complementing off-site treatment in the event of emergencies;	Vol 3, App 3B, Attachment 5 - Fresh Water, Sewage and Wastewater Management Plan (H337697-4000-10-126-0001). This document describes several design features to mitigate the risk and impact of performance issues. They include conservative design flowrates, modular equipment configuration to minimize impact from a single unit, effluent recycle capability and large effluent storage tank to allow recirculation of effluent to improve the quality. Equipment will also come with installed redundant spares for critical components such as pumps.



Item		FEIS Section	
17	Information on the location, characteristics and quantity of water required from all sources, including alternative sources, that are associated with each of the proposed temporary and permanent camps;	The quantity of water required at each site as well as the intended sources is specified in Vol 3, App 3B, Attachment 5 - Fresh Water, Sewage and Wastewater Management Plan (H337697-4000-10-126-0001). The quality of the water sources are described in Design Basis – Potable Water Treatment Plant (H337697-4000-10-109-0001).	
18	Information related to the water demand and waste generated by the proposed emergency shelters; and	There are two existing emergency shelters along the tote road. They will be used very infrequently. Any waste generated at these shelters will be trucked to the nearest camp with a permanent waste treatment facility.	
19	Information on the characteristics, name, location, and type of alternative water sources proposed for use during emergencies.	Refer to Block Flow Diagrams for each site in Vol 3, App 3B, Attachment 9 - Steensby - DWG H337697-4510-014-1107; Mine Site - DWG H337697-4210-10-002-0001 & Milne Site - DWG H337697-7000-10-002-0001	
	Volume	6	
20	Results of continued Geochemical studies aimed at assessing the effectiveness and viability of encapsulation as a method for treating potential Acid Rock Drainage/Metal Leaching (ARD/ML) materials;	Vol 3, App 3B, Attachment 5 - Waste Rock Management Plan, Annexes 3, 4 and 5 & Vol 6, App 6B - Geotechnical Investigation	
21	Results of continued ARD/ML assessments being conducted on quarries and borrow pits within the project area; and	Vol 3, App 3B, Attachment 5 - Waste Rock Management Plan, Annex 3	
22	Information on major and minor eskers or wetlands situated within the Local Study Area (LSA)	Vol 6, Sec 2.4.2 & Vol 6, App 6D - Ecological Land Classification	
	Volume		
23	Increases in data points for baseline data for water quality and sediment quality for the Milne Tote Road area; and	Vol 7, App 7B Water and Sediment Quality Baseline Report has been updated with 2011 information	
24	Justification for using Mean Annual Runoff data obtained from just one monitoring station in the characterization of the Phillips Creek watershed.	Vol 7, Sec 1.2 (Milne Port)	
	Volume 10		
25	Must include functional plans are required for the activities and/or facilities that will act as precursors or support for other proposed activities	Vol 3, App 3B, Attachment 5 - Management Plans, and FEIS Volume 10.	



Item		FEIS Section
26	The NWB further recommends that Baffinland include the following plans and documents in the FEIS.  • A comprehensive monitoring plan that addresses waste disposal and water related activities and facilities; and  • Sufficiently detailed design drawings and Operation and Maintenance Plans for all relevant waste disposal and water related facilities to meet NWB licensing standards.	<ul> <li>Vol 3, App 3B, Attachment 5 - Waste Management Plan (H337697-0000-07-126-0001), Freshwater Supply, Sewage and Wastewater Management Plan (H337697-4000-10-126-0001) and Environmental Monitoring Plan (H337697-0000-07-126-0001).</li> <li>Vol 3, App 3B, Attachment 9, Drawings for Milne, Mine Site, Steensby and Railway.</li> </ul>
27	Baffinland is encouraged to address NWB's detailed recommendations and/ or comments set out in Attachment B (Technical Review Submission) when resubmitting these listed plans in the FEIS.	Noted - See concordance to comments on Apppedix B at the end of this table.
	Appendix 10B-Environme	ental Protection Plan
28	It is recommended that the following sections be revised to include proposed activities covered in the DEIS: 1.2, 1.4, 2.4, 2.5, 2.7, 2.9, 2.15-2.18, 2.20-2.22 and 3.0. Some of the specific items that should be addressed are as follow:	Agreed. Will include in future revision prior to project execution.
29	Section 1.2 of the Plan states that the plan is designed to ensure that personnel understand and implement environmental protection procedures for both routine activities and unplanned events associated with the Bulk Sampling Program. Since the activities proposed in the draft Type A water licence application included in the DEIS as well as their potential environmental impacts are more extensive in scope than that encompassed by the Bulk Sampling Program, it is recommended that the objective of the Plan be broaden to include those activities.	Agreed. Will include in future revision prior to project execution.
30	Section 1.4 provides information on environmental approvals. This section should be updated to reflect new and renewed permits and leases issued to the project subsequent to submission of the DEIS. In addition, information on pending permits and leases related to the project should also be included in this section	Agreed. Will include in future revision prior to project execution.



Item		FEIS Section
31	Section 2.4 provides information on water use for camps and drilling activities allowed for under the Bulk Sampling Program. It is recommended that this section be broaden to include water use for camps, mining and drilling activities proposed in the draft Type A water licence application listed in the DEIS.	Agreed. Will include in future revision prior to project execution.
32	Section 2.7 refers to fuel storage and handling requirements for just the Bulk Sampling Program. It is suggested that the scope of this section be expanded to include fuel storage and handling requirements proposed in the DEIS.	Agreed. Will include in future revision prior to project execution.
33	Information on hazardous substances, including waste oils and lubricants currently stored or proposed to be stored should be included in the Plan.	Agreed. Will include in future revision prior to project execution.
34	Section 2.9 states that turbidity levels will be monitored by environmental monitors during and after construction of water courses. It is recommended that levels be monitored prior to construction to establish inherent or baseline turbidity levels.	It is in the opinion of BIM that baseline studies have already been completed. Adaptive management will be used based on ongoing monitoring.
35	Section 2.15 should be expanded to include the volume of sewage generated and methods of treatment for all existing and/or proposed camp facilities in the draft EIS.	Agreed. Will include in future revision prior to project execution.
36	Section 2.16 should be expanded to include Hazardous Materials generated by current activities and facilities proposed in the DEIS.	Agreed. Will include in future revision prior to project execution.
37	Section 3.0 should include procedures and forms for reconciling fuel, logs forms for water use, logs forms for sewage treated, logs forms for waste disposed of onsite, and an inspection form for the water treatment facilities.	Agreed. Will include in future revision prior to project execution.



Item		FEIS Section
	Appendix 10C-1 Emergency a	and Spill Response Plan
38	Table 1.0 contains a list of organizations to which the spill contingency plan is distributed. It is suggested that copies of the revised plans be provided to Aboriginal Affairs and Northern Development Canada (AANDC) and Environment Canada (EC) as both organizations have a vested interest in the potential impacts of spills on the environment.	Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Table 1.0, Pg. 3
39	Section 2.1, Pg. 11, states that a list of different spill kits and their content are provided in Attachment 2. However, Attachment 2 indicates that the information is contained in Annex 4 (Resident Spill Response Equipment, Milne Port OPEP (SD-ERP-002)). Annex 4, however, is not included in the document referenced.	Vol 3, App 3B, Attachment 5 - Milne Port OPEP (SD-ERP-002), Annex 4, Pg. 38
40	Table 3.2, Pg. 15, contains information pertaining to the characterization of emergency related operational incidents/accidents. The table seems to suggest that the assignment of a particular risk rating is dependent on the environmental impact created by a single event and not necessarily impacts created by multiple events occurring concurrently. It is recommended that an explanation be provided as to how multiple events, having a cumulative risk rating equivalent to any of the single event outlined in Table 3.2, will be handled.	Vol 10, Sec 6 & App 10A-2 describe Baffinland's rock assessment methodology & Vol 9, Sec 9.3 describes how this methodology is applied to accidents and malfunctions



Item		FEIS Section
41	Section 3.2.1.4, Pg. 17, states that, if necessary, fresh water will be trucked from alternative sources if the ones that are approved for use are compromised. It is recommended that a list of potential alternative sources and withdrawal rate(s) be included in the Plan. This information will assist the NWB in determining whether potential alternative sources will be capable of meeting the potential demand. In addition, it should be noted that NWB's approval is required prior to using water sources not approved for use under a particular Licence.	Please note that this issue has been addressed in: Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Section 3.2.1.4
42	Section 3.2.1.6, Pg. 17, indicates that in the event of sewage system failure latrine toilets may be used as an alternative to disposing sewage. The plan should note that if latrine toilets are not approved for use under the licence, NWB approval will be required prior to constructing and using such facilities.	Please note that this issue has been addressed in: Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Section 3.2.1.6
43	Section 3.2.3.1, Pg.18, includes information in relation to the impact that floods can have on the roads and railway. Since the impact of floods may not necessarily be confined to the roads and railway, it is recommended that other project related infrastructure that could be affected by floods be included in this section.	Please note that this issue has been addressed in: Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Section 3.2.3.1
44	Section 3.2.4.2, Pg.20, states that appropriate mitigation and preventative programs will be developed subsequent to incidents involving ground instability. It is suggested that a more proactive approach, involving the development of preventive and mitigation measures, be considered prior to the occurrence of such events and effectiveness of measures developed be assessed after first event.	Please note that this issue has been addressed in: Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Section 3.2.4.2



Item		FEIS Section
45	Section 6.1.1.2, Pg. 31, addresses spill scenario involving Day Tanks/Temporary Storage Areas. However, no information is included on the number of such facilities that are proposed. It is recommended that an inventory of the aforementioned facilities, existing and/or proposed, be included in the Plan.	Please note that this issue has been addressed in: Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Section 6.1.1.2
46	Section 6.3, Pg.35, Table 6.4, provides information with respect to sewage generated, treated and discharged by temporary and permanent camp facilities. Based on the information, it is unclear how much sewage will be generated from each camp. It is suggested that each camp be listed along with sewage storage and/or treatment facilities and the amount of sewage generated. In addition, this section should include spill response procedures for addressing broken/dislodged sewer lines.	Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan tables: 6.3.1.1, 6.3.1.2, and 6.3.1.3 on Pgs. 41-42
47	Section 7.0, Pg. 37, states that Schedule B contains reportable quantities of hazardous substances; however, the schedule appears to be missing from the Plan	Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Annex 7, Pg. 58
48	The contact person for the Department of Fisheries and Ocean Canada in Section 7.0, Table 7.1 of Plan should be updated as the person listed is no longer employed with DFO.	Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan. Table 7.1, Pg. 43
49	The Plan should include an inventory of all hazardous substances stored on site.	Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Annex 4, Pg. 49
50	Procedures for responding to spills involving the rail and fuel transport truck should be included in the Plan.	Vol 3, App 3B, Attachment 5 - Emergency Response and Spill Contingency Plan, Annex 6, pg. 52
51	Actual copies of the MSDS for all hazardous substances stored on site should be included in the Plan.	Vol 3, App 3B, Attachment 5 - Hazardous Waste Managment Plan, Annex 1



Item		FEIS Section
52	A site map that is specifically designed to emphasize spill response elements should be provided. The map should depict spill response equipment, fuel caches, nearby water bodies, camp infrastructures, and other relevant information.	Vol 3, App 3B, Attachment 5 - Hazardous Waste Managment Plan, Annex 8
53	Responses to the spill incidents involving on- site wastewater storage facilities should be included in the Plan.	Response and Spill Contingency Plan, Tables 6.3.1.1, 6.3.1.2, 6.3.1.3
	Appendix 10C-2 Milne Port - Oil	Pollution Emergencies Plan
54	Section 3.2, Pg. 6, provides information about the existing bulk fuel storage facility at Milne Inlet, which consists of fuel bladders. The section does not address the proposed bulk fuel storage facility and temporary fuel storage facility identified in the project description of the DEIS. To ensure that all fuel storage facilities associated with the Milne Inlet site are documented in the Plan, it is suggested that this section be revised to include all existing and proposed fuel storage facilities.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Milne Inlet Fuel Storage Facility (H337697-0000-07-126-0009), Section 3.2.
55	Section 4.1, Pg. 10, refers to ship-to-shore fuel transfer procedures associated with the existing Bulk Fuel Storage Facility only. It is suggested that the scope of this section be expanded to include the proposed tank farm facility in the DEIS.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Milne Inlet Fuel Storage Facility (H337697-0000-07-126-0009, Section 4.1.
56	Section 5.1, Pg. 11, states that copies of the relevant Material Safety Data Sheets (MSDS) are provided in Annex 8; however, Annex 8 appears to be absent from the document.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Milne Inlet Fuel Storage Facility (H337697-0000-07-126-0009), Annex 8
57	Section 5.5, Pg. 18, Table 5.2, the contact person for DFO-Iqaluit should be updated as the contact is no longer employed with DFO.	Agreed. All contacts will be updated prior to any fuel transfer.
58	Section 6.3, Pg. 24, Table 6.3, should be expanded to include spill response scenarios for spills occurring within the tank farm facility.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Milne Inlet Fuel Storage Facility (H337697-0000-07-126-0009), Section 6.3



Item		FEIS Section
59	Section 7.1 Pg. 26, references section 7.1.1 of the same Plan for information pertaining to training. However section 7.1.1 appears incorrectly labeled in the Plan	Vol 3, App 3B), Attachment 5 - Oil Pollution Emergency Plan: Milne Inlet Fuel Storage Facility (H337697-0000-07-126-0009), Section 7.1.1
60	It is suggested that proposed procedures and/or information related to hydrostatic testing for the proposed bulk fuel storage facility be included in the Plan.	X-Ray testing of wells will be used due to climatic conditions.
61	It is recommended that the appendices, Annexes 1 to10, be included in the Plan.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Milne Inlet Fuel Storage Facility (H337697-0000-07-126-0009), Annexes 1 to 10
62	Information on overfill protection devices, such as, level sensors and backflow prevention devices that can assist in preventing spills should be included in the Plan.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Milne Inlet Fuel Storage Facility (H337697-0000-07-126-0009), Section 7.3
	Appendix 10C - Steensby Port Oi	Pollutions Emergency Plan
63	Section 3.2, Pg. 11, provides information related to proposed permanent fuel storage facilities. It is suggested that the Plan address all fuel storage facilities, including any current temporary fuel storage facility associated with the site.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Steensby Inlet Fuel Storage Facility (H337697-0000-07-126-0010), Section 4.2
64	Section 5.1, Pg. 16, states that copies of the Material Safety Data Sheets (MSDS) for substances stored on site are provided in Annex 8; however, Annex 8 appears to be absent from the document.	Vol 3, App 3B, Attachment 5 - Hazardous Materials and Hazardous Waste Management Plan (H337697-0000-07-126-0002), Annex 1
65	Section 5.5, Pg. 23, Table 5.2, the contact person for DFO-Iqaluit should be updated as the contact is no longer employed with DFO.	Agreed. All contacts will be updated prior to any fuel transfer.
66	Information on overflow protection devices, such as, level sensors and backflow prevention devices that can assist in preventing spills should be included in the Plan.	Vol 3, App 3B, Attachment 5 - Hazardous Materials and Hazardous Waste Management Plan (H337697-0000-07-126-0002), Section 7.3



Item		FEIS Section
67	Section 6.5, Pg. 28, states that spills less than 5m3 will be handled by response personnel in accordance with the Plan. For spills larger than 5m3, it is stated that the onsite coordinator will determine the response level required without actually specifying procedures for dealing with spills larger than 5m3. It is recommended that any revision of the Plan should include actual procedures for dealing with large spills.	In commitment #320 & 321, Baffinland stated its intention to be self-sufficient in terms of search and rescue operations as well as spill response. This will apply at the onset of the Operation. During construction, the EPCM contractor will maintain necessary equipment and trained personnel at the Steensby Port at all times to enable the Company to respond effectively to spills within close proximity to the port.  Fuel shipments will be delivered during the open water period. All vessels transporting fuel to the site will be licensed to navigate in Canadian waters and therefore will have a Transport Canada approved SOPEP. As per the current situation/practice throughout the Arctic, until Baffinland's fleet is operational, Baffinland will rely on the assistance of the Canadian Coast Guard for search and rescue operations and assistance to respond to accidental events during ship transit to the port sites.
68	Section 7.1, Pg. 29-30, contains two subsections, 1.1.1 – Training Content and 1.1.2 – Short -Notice Training, which appear to be improperly labeled.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Steensby Inlet Fuel Storage Facility (H337697-0000-07-126-0010), Section 7.1
69	It is suggested that proposed procedures and/or information related to hydrostatic testing for the proposed fuel storage facility be included in the Plan.	X-Ray testing of wells will be used due to climatic conditions.
70	It is recommended that the appendices, Annexes 1 to10, be included in the Plan.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Steensby Inlet Fuel Storage Facility (H337697-0000-07-126-0010), Annexes 1 - 9



Item		FEIS Section
71	If the guidelines for the DEIS do not require separate plans, it is suggested, that both Oil Pollution Emergencies Plans be combined since there are significant overlaps in the information provided in each Plan. A combined Plan may help to increase effectiveness and functionality of the Plans.	Although agreed there is a lot of overlap, for the purpose of this document it is believed it would best to keep plans separate as the infrastructure and activities differ and future revisions may further differentiate.
72	There appears to be some ambiguities concerning where the Oil Pollution Emergency Plan starts and ends and where the Emergency and Spill Contingency Plan begins. This can potentially impact the functionality of both plans. Even though there is the recognition that overlaps should and do exist between the two Plans, it is recommended that a more precise separation, with respect to the content and usage of the plans, be established.	Vol 3, App 3B, Attachment 5 - Oil Pollution Emergency Plan: Steensby Inlet Fuel Storage Facility (H337697-0000-07-126-0010), Section 2.3
	Appendix 10C-4 Explosive	es Management Plan
73	Section 3.0, Pg. 6, provides information concerning temporary and permanent explosives storage facilities, without actually elaborating on the number of dayuse magazines sites that will be in operation along the railway site at a given time. It is suggested that this information be included in the Plan.	Vol 3, App 3B, Attachment 5 - Explosives Management Plan (E337697-PM407-50-126- 0001), Section 2.5.1
74	Section 3.3, Pg. 8, states that run-off water associated with ammonium nitrate storage will be allowed to drain and will be pumped out as needed. Information should be provided on where the pumped out water will be disposed of and what steps will be taken to ensure that it meets discharge criteria before being released.	Vol 3, App 3B, Attachment 5 - Explosives Management Plan (E337697-PM407-50-126- 0001), Section 4.1
75	Section 4.3, Pg. 10, states that an Explosives Management Plan will be developed by the contractor to handle incidents such as fire, explosions, etc. To prevent redundancies and promote consistency between the contractor's Plan and this Plan, it is suggested that the contractor's Explosives Management Plan be incorporated into this Plan.	Vol 3, App 3B, Attachment 5 - Explosives Management Plan (E337697-PM407-50-126- 0001)



Item		FEIS Section
76	Section 4.3.1, Pg. 11, refers to a Blasting Plan that will be developed by a contractor for use during blasting activities proximal to water bodies. It is suggested that the Blasting Plan be incorporated into the Explosives Management Plan for increased functionality.	Please note that blasting plans will be developed by the contractor once one has been selected.
77	Section 4.4, Pg. 11, refers to additives that might be used to increase the storage life of diesel fuel, if necessary. It is suggested that these substances be included in the inventory of the Emergency and Spill Response Plan if they are going to be stored on site.	Please note: This has been removed from the new plan created by the subcontractor Orica and is thus no longer relevant.
78	Section 4.6.2, Pg. 15, provides disposal methods for explosive materials without precisely stating which of the methods are preferred and/or will likely be used. It is recommended that the methods of disposal be ranked in order of increase preference so that interested parties can comment accordingly.	Vol 3, App 3B, Attachment 5 - Explosives Management Plan (E337697-PM407-50-126- 0001), Section 4.1
79	Copies of the Material Safety Data Sheets (MSDS) and/or appropriate referencing should be included in the Plan.	Vol 3, App 3B, Attachment 5 - Explosives Management Plan (E337697-PM407-50-126- 0001), Appendix D
80	A site map depicting the locations of existing and/or proposed Explosive Management Facilities should be included in the Plan.	Site Layout (H337697-7000-10-014-1006)
	Appendix 10D - Surface Water and Aqua	atic Ecosystems Management Plan
81	Section 1.2, Pg. 1, contains information related to regulatory requirements including the requirements for water and wastewater generated from activities related to the Type "B" Licence. Since the Aquatic Management Plan is aimed at addressing potential impacts to surface water and aquatic ecosystem associated with the entire project, it is suggested that the scope of the Plan be expanded to include potential impacts associated with activities proposed in the DEIS.	The Environmental Impact Mitigation Stratergies described in the current Surface Water and Aquatic Ecosystem Management Plan (Vol 3, App 3B, Attachment 5) are applicable trhoughout 2012 and beyond and no specific reference to 2012 work is required



Item		FEIS Section	
82	Section 1.2, Pg. 4, states that grey water sumps, waste disposal areas and latrines will be situated at a minimum of thirty (30) metres for the ordinary high water mark. It is recommended that the distance be revised to thirty-one (31) metres so as to reflect general water licensing conditions.	Vol 3, App 3B, Attachment 5 - Surface Water and Aquatic Ecosystem Management Plan )H337697-4000-10-126-0001), Section 1.2, Pg 4	
83	Section 4.4, Pg. 26, seems to suggest that the temperature of surface and subsurface conditions will be solely relied upon to ensure that potential acidforming reactions are prevented. It is recommended that contingency measures be developed for situations where the weather conditions combined with operational conditions do not favor the prevention of such reactions.	Vol 3, App 3B, Attachment 5 - Surface Water and Aquatic Ecosystem Management Plan (H337697-4000-10-126-0001), Section 5.4. Refer to the Waste Rock & Ore Stockpile Management Plan (Vol 3, App 3B, Attachment 5) for a detailed discussion on geochemistry and ARD potential.	
84	Table 4.4, Pg. 28, provides a breakdown of various activities for which water will be required. It is suggested that the total annual water demand for the various phases of the project be included in the Plan.	Vol 3, App 3B, Attachment 5 - Surface Water and Aquatic Ecosystem Management Plan (H337697-4000-10-126-0001), Appendix A	
	Appendix 10D3 - Wastewa	ter Management Plan	
85	The Wastewater Management Plan is developed to fulfill the requirements of the water licence issued for the Bulk Sampling Program. As such, the Plan does not necessarily address waste water management and related issues identified in the DEIS. It is therefore recommended that the scope of the plan be expanded to cover both existing facilities and/or facilities proposed in the DEIS.	Vol 3, App 3B, Attachment 5 - Freshwater Supply, Sewage and Wastewater Managmen Plan (H337697-4000-10-126-0001)	
	Appendix 10D4 - Waste Management Plan		
86	Section 3.2, Pg. 13, states that after waste minimization techniques are applied the remaining waste will be handled in a practical and environmentally sensible manner. It is suggested that the information be provided about actual techniques that will be used to minimize waste.	Vol 3, App 3B, Attachment 5 - Waste Management Plan (H337697-0000-07-126- 0001), Section 4.4	



Item		FEIS Section
87	Section 3.3, Pg. 13, refers to permanent waste facilities that will be constructed at Steenby Port and the Mine site without providing details on the types and number of those facilities. It is suggested that a detailed inventory of all waste management facilities proposed for construction at the Steensby Port, Mine Site and other project sites be included in the Plan.	Vol 3, App 3B, Attachment 5 - Waste Management Plan (H337697-0000-07-126- 0001), Section 4.3.4
88	Section 3.8, Pg. 20, states that water affected by hydro-carbons will be treated using the appropriate technology without elaborating on the treatment options being contemplated. It is suggested that the proposed method(s) for treating hydrocarbon-contaminated water be included in the Plan.	Vol 3, App 3B, Attachment 5 - Waste Management Plan (H337697-0000-07-126- 0001), Annex 5
89	All relevant engineering design drawings, facility design and operation and maintenance plans provided for waste storage and disposal facilities should be accordingly referenced in this Plan.	Vol 3, App 3B, Attachment 5 - Waste Management Plan (H337697-0000-07-126- 0001), Annex 2
90	Information for preventing wildlife from accessing waste storage and treatment facilities should be included in the Plan.	Vol 3, App 3B, Attachment 5 - Waste Management Plan (H337697-0000-07-126- 0001), Section 4.3.1, 4.3.3, 4.34, 5.1 and 7.1.2
	Appendix 10D5 - Waste Ro	ock Management Plan
91	Section 3.5, Pg. 11, states that ore will be stored in a Run-of-Mine (ROM) stockpile located near the crusher and that following crushing and screening, four temporary ore stockpiles will be used for storing crushed and screened ore. Other than stating that the drainage will be controlled there is insufficient information pertaining to how the ore storage and associated drainage areas will be constructed.	Vol 3, App 3B, Attachment 5 - Wasterock Management Plan (H337697-0000-07-126- 0012), Section 3.6.2



Item		FEIS Section
92	Section 3.6.1, Pg. 11, provides the basis by which the proposed runoff management system for the waste rock storage area consisting of berms around the stockpile perimeter and two separately sized surface water management ponds will operate. It is suggested that information related to intermediate and final discharge points be included in this section of the plan.	Vol 3, App 3B, Attachment 5 - Wasterock Management Plan (H337697-0000-07-126- 0012), Section 3.7.1
93	The Plan is more or less conceptual and, as such, it includes in some cases more than one proposed options for addressing components like runoff water treatment. It is suggested that, as the details become available, more definite options be presented.	Vol 3, App 3B, Attachment 5 - Wasterock Management Plan (H337697-0000-07-126- 0012), Section 3.7.3
	Appendix 10D-6 - Borrow Pit and	d Quarry Management Plan
94	Section 3.1, Pg. 7, states that there is the requirement for a thirty (30) metre setback from streams to ensure that impacts of pit/quarry operation on surface water quality are minimal. It is suggested that the setback distance be changed to thirty-one (31) metres so as to be consistent with the NWB general licensing conditions.	Vol 3, App 3B, Attachment 6 - Borrow Pit and Quarry Management Plan (H337697-7000-07-126-0006), Section 3.1, Pg. 7
95	Section 3.3, Pg. 8, mentions that a detailed Development Plan will be provided prior to extracting materials from borrows pits or quarries. It is suggested that the Development Plan be incorporated into the Borrow Pit and Quarry Management Plan.	Vol 3, App 3B, Attachment 6 - Borrow Pit and Quarry Management Plan (H337697-7000-07-126-0006), Section 3.3, Pg. 8
96	Section 3.6, Pg. 10, provide a brief outline on activities related to closure of borrow pits and quarries. It is recommended that the scope of this section be expanded to include monitoring, follow-up inspections and other activities in support of complete reclamation of these sites.	Vol 3, App 3B, Attachment 6 - Quarry Management and Operations Plan: Quarry Q7 +500 - H337697-7000-07-126-0009, Section 4, Pg. 11- 12. Quarry Q77 +200 - H337697-7000-07-126-0008, Section 4, Pg. 13-14. Quarry Q133 +500 - H337697-7000- 07-126-0007, Section 4, Pg. 13-14



Item		FEIS Section
97	The Plan is limited in the sense that it does not contain information related to the development of borrow pits and quarries, which is one of the most critical aspects involving these activities.  Appendix 10D-8 - Road	Vol 3, App 3B, Attachment 6 - Borrow Pit and Quarry Management Plan (H337697-7000-07-126-0006), Section 3.3  Management Plan
98	Section 3.1, Pg. 7, mentions that roads will be designed to minimize the potential erosion, ponding of water, etc., without providing detailing on what preventative strategies and/or measures that will be implemented. It is recommended that the actual measure and strategies for managing runoff and controlling road erosion be included in the plan.	Vol 10, App 10D-8, Roads Management Plan H337697-0000-07-126-0007, Section 3.1, Pg. 7
99	Section 3.1.2, Pg. 7, references the Surface Water and Aquatic Ecosystem Management Plan under Appendix 10D-2 for details on mitigation measures related to protecting surface water quality and fish habitat. Although it is acknowledged that some overlaps may exist between this Plan and the one referenced, it is recommended that at least a summary of the mitigation measures be included in this Plan instead of relying solely on the Surface Water and Aquatic Ecosystem Management Plan to provide this information.	Vol 10, App 10D-8, Roads Management Plan H337697-0000-07-126-0007, Section 3.2, Pg. 7, 8.
100	Section 3.2.1, Pg. 8, states that water or dust suppressants might be used on roads as required. It is recommended that information be provided on the names and/or types of all dust suppressants that might be used so that the Board can assess the potential impact of these substances.	Vol 10, App 10D-8, Roads Management Plan H337697-0000-07-126-0007, Section 3.2.1, Pg. 9
101	Section 3.2.1, Pg. 8, includes information on road closure during unsafe conditions. It is recommended that information on abandonment and closure of roads be included in the Plan.	Vol 10, App 10D-8, Roads Management Plan H337697-0000-07-126-0007, Section 3.2.1, Pg. 9
102	Section 6.1, Pg. 10, states that roads will be inspected regularly. It is recommended that the frequency and type of inspections be included in the Plan.	Vol 10, App 10D-8, Roads Management Plan H337697-0000-07-126-0007, Section 6.1, Pg. 11.



Item		FEIS Section	
	Appendix 10D-9 - Railwa	y Management Plan	
103	Section 1.1, Pg 2, states that there are operating rules and standard procedures for inspection and maintenance of both rolling stock and infrastructure mentioned in the Plan. It is recommended that the operational rules and standard procedures mentioned be incorporated into this Plan.	Vol 10, App 10D-9.1 - Railway Management Plan	
104	Section 3.6, Pg. 10, provides information on containing spills involving the railway. It is recommended that this section be expanded to include the response measures for railway spills or referencing where in the DEIS this information can be obtained.	Vol 10, App 10D-9.2, Sec 2.0	
105	It is suggested that an inventory of potential materials and/or substances that will be transported by the Railway be included in the Plan.	Vol 3, App 3B, Attachment 5 - Hazardous Materials and Hazardous Waste Management Plan; MSDS for bulk concentrates are attached in Annex A of this plan	
106	It is recommended that information related to abandonment and restoration of facilities associated with the railway and/or where the information could be found be included in the Plan.	Vol 3, App 3B, Attachment 10 - Preliminary Mine Closure and Reclamation Plan, Sec 8.5	
107	It is suggested that procedures for responding to and reporting of spills and other related incidents be included in the Plan.	Vol 10, App 10D-9.2, Sec 1.0	
	Appendix 10G - Preliminary Mine Closure and Reclamation Plan		
108	It is recommended that the Preliminary Mine Closure and Reclamation Plan and the 2010 Abandonment and Reclamation Plan (Appendix A) be amalgamated and streamlined so as to increase functionality and aid in comprehensively capturing existing and proposed facilities associated with the project.	Vol 3, App 3B, Attachment 10 - Preliminary Mine Closure and Reclamation Plan (H337697-0000-07-126-0014)	



Item		FEIS Section	
109	The Preliminary Mine Closure and Reclamation Plan under Appendix 10G does not include information on financial security for activities proposed in the DEIS. The 2010 Abandonment and Reclamation Plan (Appendix A) does include financial security information; however, the information concerns activities covered under the current Licence issued for the Bulk Sampling Program.	Vol 3, App 3B, Attachment 10 - Preliminary Mine Closure and Reclamation Plan (H337697-0000-07-126-0014), Section 12 & Appendix B	
110	Section 5.1 should provide information about all progressive rehabilitation activities at all project sites.	Vol 3, App 3B, Attachment 10 - Preliminary Mine Closure and Reclamation Plan (H337697-0000-07-126-0014), Section 5	
111	Section 8.1 of the Plan should include actual procedures for determining whether or not the drainage water from open pits will require treatment.	Vol 3, App 3B, Attachment 10 - Preliminary Mine Closure and Reclamation Plan (H337697-0000-07-126-0014), Section 11	
	Miscellaneou	us Items	
112	Information on the externality effects of the project on municipal water and waste disposal facilities in communities proximal to the project area; and	Vol 4, Sec 7.4.2	
113	The inclusion of the traditional names of all freshwater sources associated with the project.	Noted - to be complete in time for Water License Hearings.	
	Water Use Issues by Intervening		
	AANDC		
114	Provision of stability analyses to support the design for the waste rock stockpile and to demonstrate that the waste rock stockpile will be stable during warming of the permafrost and after the foundation thaws;	Vol 3, App 3B, Attachment 4 - Mary River - Thurbur Report - Mary River Project Development of permafrost in Waste Rock Dumps Preliminary Geotechnical Evaluation Draft for Discussion (E337697-1130-15-124- 0001) and Mary River Slope Stability for the Waste Rock Dump	



Item		FEIS Section	
115	Provision of an updated wastewater management plan for future larger construction and operation camps within the FEIS. The plan will describe how equalization tanks will be used at the Mine Site and Steensby Site to accommodate surges in sewage received from the satellite construction camps; and	Vol 3, App 3B, Attachment 5 Freshwater Supply, Sewage and Wastewater Management Plan H337697-4000-10-126- 0001	
116	Consideration in the FEIS of more recent hydrological data and revise storm water management pond, accordingly, if warranted based on the new data.	New Hydrological Data does not require a revised water managment pond	
	Environment	Canada	
117	Provision of a detailed waste rock characterization and monitoring program in the FEIS;	Vol 3, App 3B, Attachment 5 - Waste Rock Management Plan and Enviornmental Monitoring Plan	
118	Defining minimum mixing zones for the receiving environment and consider flows for worse case and average case scenarios; and	Vol 7, Sec 3.4.1.6	
119	Update surface water quality and sediment quality baseline data with new data collected in 2011 and revise water quality effects assessment.	Vol 7, App 7B this baseline report has been updated with data collected in 2011.	
	DFO		
120	Expand the following tables: A 2.1, A 2.2, and A 2.3 from Appendix 2, Volume 10, Appendix D7 of the DEIS to include average water depth and velocity estimates for the culvert and channel for various (2, 5, 10, 25,100 and 200 year) flow estimates and the fish passage flow (3Q10) as well as a summary of the available fish habitat located upstream and downstream of potential crossing locations.	Vol 10, App 10D-7 - Fish Compensation Plan	
	NRCan		
121	Provision of detailed design, thermal modeling to determine whether proposed berm design would maintain a permafrost barrier and prevent shallow subsurface seepage to the surrounding environment.	Vol 3, App 3B, Attachment 4 - Mary River - Thurbur Report - Mary River Project Development of permafrost in Waste Rock Dumps Preliminary Geotechnical Evaluation Draft for Discussion (E337697-1130-15-124-0001)	



Item		FEIS Section
	QIA	
122	Mitigation measures for blasting activities near water;	Vol 10, Sec 4.3
123	Additional explanation to justify mixing assumptions between the point of discharge and the receiving environment;	Vol 7, Sec 3.4.1.6 (Mixing Assumptions)
124	Review the selected thresholds and threshold levels for determination of magnitude of effect to ensure that they are appropriately selected and adequately described for the freshwater environment;	Vol 7, Sec 3.4.1.1 & App 7B-2
125	Provision of receiving water quality thresholds used to assess water quality effects; and	Vol 7, Sec 3.4.1.1 & App 7B-2
126	Provision of mass balance modeling estimates of nitrate losses from the use of explosive into the aquatic environment, with sufficient detail that modelling methods and assumptions can be assessed. Specific attention should be given to fish bearing waters. (Timeline FEIS)	The source of nitrate is from use of explosives. Baffinland in committed to the use of best management practices (Vol 10, Sec 4.3.3 & Vol 7, Sec 3.4.1.6)
	ADDITIONAL COMMENTS FROM (PHC Decision Appe	
	General Cor	nments
127	Minimum set-back distance above the ordinary high water mark of freshwater bodies for situating proposed infrastructure is being listed as thirty (30) metres instead of thirty-one (31) metres in some of the plans and sections of the DEIS. It is recommended that the set-back distance in all plans and relevant sections of the DEIS be revised to thirty-one (31) metres, except in cases where authorized, to allow for consistency with that of Indian and Northern Affairs Canada's (INAC) Land Use guidelines and the NWB general licensing conditions.	Noted



Item		FEIS Section
128	There are inconsistencies in the scope of activities covered under the various plans. Some cover activities under the Bulk Sampling Program while other cover activities proposed in the Draft EIS. It is suggested that, the where applicable, all project activities be considered in each plan.	Noted
129	Where applicable some of the plans should be streamlined as to reduce redundancies and increase fluidity thus making it easy to locate appropriate information when required.	Noted
130	Consistency in the use of terms should be looked at when revising the plans. For example, the Milne Inlet bulk fuel storage facility and the Milne Port fuel facility appear to be synonymous as are the Mary River camp and the Mine camp.	Noted
131	Some Plans rely solely or excessively on information contained in other Plans that should have been included in those Plans. To ensure that the users of those Plans are able to access the information as readily as possible, it is suggested that attempts be made to decrease referencing other plans for information that should and could be easily included in a specific plan.	Noted



Item		FEIS Section
	DEIS Volume 1 Ap	pendix 1C-3)
132	Block #4 of the Water Licence Application – Location of the Undertaking In response to the requirements of this item, inconsistent information is provide on the application form and in Volume 3, Table 3-1.1 and Figure 3-1.2 of the DEIS for proposed and/or existing camps. In order to ensure that the NWB captures water use and waste disposal activities associated with all existing and/or proposed camp facilities, it is recommended that the number of camps be confirmed in all sections of the DEIS including the water licence application. Once the information is confirmed and revised, it is recommended that Table 3-1.1 and Figure 3-1.2 be accordingly updated. Also, Figure 3-1.2 should depict the name of each camp next to the appropriate symbol on the map. In addition, it should be noted that a Type-A licence and multiple Type-B licenses could be issued to a project, depending on the activities undertaken. It is therefore recommended that the water licence application identify the camps (i.e. temporary/permanent) requiring approval under the Type A application.	Vol 3, App 3B, Attachment 1 - Block 4
133	Block #5 of the Water Licence Application - Maps To address the requirement in this section, a project location map and a location of project activities map, Figures 3-1.1 and 3-1.2, respectively, were provided to a scale other than that specified by NWB in Guide 4, 1:50,000. It is recommended that appropriately scaled maps be provided to satisfy the requirements of Guide 4.	Vol 3, App 3B, Attachment 11; Maps at 1:50,000 scale are included



Item		FEIS Section
134	Block #6 of the Water Licence Application - Nature of Interest in the Land Information on the expiry dates for some leases and authorizations are not included in the response to this item. Volume 2, Section 2.0 of the DEIS is referenced as containing information relevant to this item. Some dates that are excluded from the application form are included in Table 2-2.3 of the DEIS. It is suggested that, in cases where limited information is required and available, that the information be included on the application form in addition to referencing appropriate sections of the DEIS.	Noted
135	Block #7 of the Water Licence Application - NPC Determination As a response to this item, Volume 2, Section 2.2.1 of the DEIS is referenced. This section states that the Nunavut Planning Commission (NPC) views the railway as a proposal for a transportation corridor, which would possibly require an amendment to the North Baffin Regional Land Use Plan. For information purposes, it is recommended that an update be provided, if available, on the status of the potential amendment that the NPC appears to be contemplating.	Vol 3, App 3B, Attachment 12



Item		FEIS Section
136	Block #9 of the Water Licence Application - Description of the Undertaking Volume 3 of the DEIS is being referenced as containing a detailed project description in response to this item. The information provided in Volume 3 is very comprehensive; however, many of the proposed activities do not necessarily fall under the NWB's mandate. It is therefore recommended that an executive summary in English and Inuktitut that specifically addresses the requirements of the water licence application be included as an attachment to the application. This will enable parties to consistently recognize which proposed activities and/or facilities are being considered when reviewing the water licence application and related documents.	
137	Block #10 of the Water Licence Application - Options or Alternative Methods To satisfy the requirement of this item, Volume 2, Section 6.0 of the DEIS is being referenced as containing information on alternative methods; however, the volume and section referenced contains information on definitions and abbreviations instead of information on alternative methods. It is recommended that the appropriate referencing be provided.	Noted



Item	FEIS Section
Block #11 of the Water Licence Application - Classification of Primary Undertaking According to the response to this item, the undertaking that is being applied for is classified as Mining and Milling (including exploration/drilling/exploration camp). In addition, the types of undertaking being applied for, in accordance with Schedule II of the Northwest Territories Waters Regulations, are described as follow: Hydrostatic Testing, Landfarm & On-site Storage of Hydrocarbon Contaminated Soil, Mineral Exploration/Remote Camp, Advance Exploration, Mine Development, General Water Works, and Power. As part of the requirements of the water licence application, supplemental information pertaining to the types of undertaking must be provided with the application. It is recommended that the information requirements under this item be provided as an attachment to the water licence application and/or by referencing the appropriate volume(s) and/or section(s) of the DEIS.	Vol 3, App 3B, Attachments 2 to 11 provide the supplemental information requested



Item		FEIS Section
139	Block #13 of the Water Licence Application - Quantity of Water Involved Several sections of DEIS identified in the application contain the information required under this item. However to expand on the information provided, Volume 3, Table 3-1.1 and Volume 10, Appendix 10D-2, Table 4.4, of the DEIS, the following are recommended: Table 3-1.1 should include the combined annual water demand for all project sites and the overall water demand for the entire project for the term of the licence being contemplated. Table 4.4 should include the total annual water demand for all activities listed under each project site and the total water demand for the entire project for the term of the licence contemplated. In addition, both tables seem to suggest that the annual water demand for the Railway consists of the combined water requirements for the Mid-Rail, Ravn River, Tunnels and S. Cockburn camps. It is recommended that the later demand for each of those camps be included as a subset of the total demand for the Railway.	Vol 3, App 3B, Attachment 1, Block 13
140	Block #15 of the Water Licence Application - Quantity and Quality of Waste Involved The information required under this item is contained in the sections referenced in the DEIS. To expand on the information provided, Volume 10, Appendix 10D-4, Table 3.2 should be revised to list the volume of waste generated by each of the camps associated with the railway as a subset of the combined volume of waste generated for Railway camps. In addition, Volume 10, Appendix 10D-4, Table 3.4, should include approximate quantities of hazardous waste generated and disposal method(s) for all hazardous wastes listed. Information should also be provided for all wastes generated by the two emergency shelters.	Vol 3, App 3B, Attachment 1, Block 15; Attachment 5 - Hazardous Materials and Hazardous Wast Management Plan



Item		FEIS Section
141	Block #16 of the Water Licence Application - Other Authorizations The appropriate section of the DEIS referenced, Volume 2, Section 2.0, contains the information required under this item; however, some of the information is now outdated. It is suggested that the information referenced in the DEIS, including Table 2-2.3, be updated to include new, renewed, and pending authorizations, leases and permits.	Vol 3, App 3B, Attachment 1, Block 16
142	Block #18 of the Water Licence Application - Water Rights of Existing and other Users of Water  The response to this item indicates that there are no known water users within the project area who will be affected by the proposed undertaking and, as such, matters related to compensation agreements are not applicable. Information should be provided to support this determination.	Vol 3, App 3B, Attachment 1, Block 19, water compensation under renogotiation within the framework of the IIBA
143	Block #19 of the Water Licence application - Inuit Water Rights It is stated that there will be no "substantial effect" to the quality, quantity or flow of water through Inuit Owned Land (IOL) due to the undertaking. The term "substantial effect" should be qualified or explained; the inclusion of appropriate referencing to the DEIS is also suggested.	Vol 7, Sec 3.4.1.8



Item		FEIS Section
144	Block #21 of the Water Licence Application - Security Information  The item requires that an estimate of the total financial cost for final reclamation be provided. Volume 3, Section 4.0, and Volume 10, Appendix 10G are referenced as containing the required information.  However, the review of the information provided in Volume 3, Section 4.0, identifies information related to reclamation activities; however, no reclamation cost estimate has been provided. The review of the information contained in Volume 10, Appendix 10G-A, Sections 8.0 and 9.0, identified reclamation cost estimates; however, the estimate provided appears to be covering reclamation activities for components of the existing licence, 2BE-MRY1114, instead of the scope of activities proposed in this application (DEEIS). It is recommended that a revised reclamation cost estimate be provided using the most recent version of RECLAIM model.	Vol 3, App 3B, Attachment 10 - Preliminary Mine Closure and Reclamation Plan
145	Block #22 of the Water Licence Application - Financial Information  The response to this item states that financial information related to the BIMC is forthcoming. Prior to the issuance of a licence, assurance is needed that the potential licensee is committed and capable of accepting all financial responsibilities associated with the undertaking. It is suggested that the information required under this item be provided.	Vol 3, App 3B, Attachment 2



Item		FEIS Section
146	Block #23 of the Water Licence Application - Studies undertaken to date As a response to this item, it is stated that a completed compilation of studies, reports and research is provided in the 2010 DEIS, without specifying which parts of the DEIS contain the information. Since all studies, reports and research contained in the DEIS are not related to the water licence application, it is recommended that a list of the ones relevant to the application be included on the application form in addition to appropriate referencing to the DEIS.	Vol 7, App 7A; App 7B & App 7C; baseline studies relevant to the Water License Application
147	Block #24 of the Water Licence Application - Proposed Schedule In response to this item Volume 3, Section 1.3 of the DEIS is being referenced. In addition to referencing the DEIS, it is suggested that tentative dates be included in the application as the schedule provided in the DEIS might not necessarily be consistent with the projected schedule for activities proposed in the water licence application.	Vol 3, Figure 3-1.3 & Vol 3, App 3B, Attachment 1, Block 24
148	Block #25 of the Water Licence Application - Proposed Term of Licence Specifics are not provided with respect to the actual term for which the licence is required in the response to this item. Because the term of a licence plays a crucial role in the decision surrounding issuance of a water licence, it is suggested that a proposed term for the licence be provided.	25 years



Item		FEIS Section
149	Block #26 of the Water Licence Application - Annual Reporting The response to this item states that the details on the content of the annual report for the project will be determined from future technical meetings. Even though future technical meetings will contribute to the final form and content required for technical reporting, there is a requirement for a proposed reporting outline or template to be included in the water licence application. It is suggested an outline or template for the annual report be provided as it may prove helpful during discussions related to reporting during technical meetings.	Vol 3, App 3B, Attachment 1, Block 26
150	Miscellaneous Items As required by the Nunavut Waters and Nunavut Surface Rights Tribunal Act and the Northwest Territories Waters Regulations (Regulations), a complete application shall include the Application Fee of \$30.00 CDN and a deposit equal to the Water Use Fee payable under subsection 9(1) of the Regulations, in respect of the first year of the licence that is being applied for, calculated using Indian and Northern Affairs Canada, Northern Affairs Organization, Land and Water Management, NCR, Water Use Fee Calculator, (Ver. 1.4).	Vol 3, App 3B, Cover Letter (copy of cheque attached)



Item		FEIS Section
	Volume 1: Main Document, Conco	rdance Table (Appendix 1C-2)
	The review of the information contained in the concordance table accompanying the water licence application has determined that the referencing to the DEIS provided are mostly valid. There are some instances, however, where no referencing is provided because the information was apparently not available for inclusion during the preparation of the DEIS, and other instances where, instead of including the information in the DEIS, a website is being referenced. In order to ensure that the information related to the water licence application is consistent and readily accessible in the DEIS for consideration during the review process, it is recommended that the DEIS and the concordance table be updated accordingly in any revision of the DEIS:	Noted
151	The section that applies to the "NIRB Determination" states that the required information is available on the NIRB's website without actually including the information in the DEIS. For expediency and consistency reasons, it is suggested that the information be also included in the DEIS.	The NIRB Screening Decision and EIS Guidelines are located in Vol 1, App 1B-8
152	The section that applies to "Financial Information" states that the required information is not applicable for the current phase of the project. This information should be included for review.	Vol 3, App 3B, Attachment 2
153	The sections related to the "Proposed Term of Licence" and "Annual Reporting" requirements should be addressed as they contribute to the decision process related to issuance of a licence.	Vol 3, App 3B, Attachment 5 - Environmental Monitoring Plan



Item		FEIS Section
	Volume 2: Consultation, Regulatory Frame	ework and Assessment Methodology
154	Section 2.2.5, Pg. 23, states that if it is determined through the environmental review process that the project activities are expected to substantially affect the quality, quantity or flow of water on Inuit-owned lands, the proponent will be required to enter into a water compensation agreement with the QIA. Information on whether there is any existing compensation agreements related water use under the current type "B" Licence and how any existing water compensation agreement(s) could be affected should be provided.	Vol 2, Sec 2.2.4 & Vol 3, App 3B, Attachment 1, Block 19; water compensation being renegotiated under the IIBA
155	Table 3-1.1, Pg. 26, Table, 2-2.3 lists current authorizations associated with exploration activities for the project. Some of the authorizations listed are expired and/or renewed, as well as new ones probably issued subsequent to the submission of the DEIS. In order to ensure that the information in the table is as current as possible, it is suggested the table be updated with the most recent information.	Noted
	Volume 3: Project	Description
	Table 3-1.1, Pg. 3-4, lists key facts about the project, including a useful break-down of the quantities of certain types of resources that will be allocated during various phases of the projects. To add to the information contained in the table, it is recommended that the following changes be included in any revision	Noted



Item		FEIS Section
156	Under the "Treated (Sewage) Effluent" section, information is provided with respect to the combined volume of sewage generated by the Raven River, Cockburn Lake and Cockburn South camps. Sewage generated by these camps is intended to be treated offsite by at least two different wastewater treatment facilities. To assist in assessing whether contingency measures for sewage disposal are appropriate for each camp during any interruption in off-site treatment, it is therefore suggested that information related to the quantity of sewage generated by each camp be provided.	Vol 3, App 3B, Attachment 5 - Freshwater Supply, Sewage and Wastewater Management Plan, Sec 5.4, 5.4.2 & 5.4.3
157	Under the "Water Demand" section of the table, it appears that the water demand for the Railway encompasses the combined water demand for the Mid-Rail, Raven River, Cockburn Lake, and Cockburn South camps. To enable the NWB to assess the potential demand placed on the respective water source supplying each camp, it is recommended that the quantity of water for each camp facility be provided as a subset of the demand for the Railway.	Vol 3, App 3B, Attachment 5 - Freshwater Supply, Sewage and Waste Water Management Plan, Table 4-1
158	The emergency shelters at Tote Road site are included on the list of camps in Table 3-1.1, however no information is provided with respect to the water demand and quantities of sewage generated by each of those facilities. It is suggested that this information be included.	There is no water consumed at these respective shelters.



Item		FEIS Section
159	The "Fuel Storage" section provides information pertaining to an unspecified number of temporary 20,000-litre Isocontainers that may potentially be installed at the Milne Port, Tote Road, Railway, and Steensby sites. In order to easily confirm the quantity of fuel at a given time at each site, it is recommended that the number of Iso-containers at the various sites be included in the table.	The exact number of ISO-containers that may be required at a given time at each site will be dependent on the execution of final construction requirements determined by the primary contractor.
160	Section 2.1.8, Pg. 22, states that a tank-farm consisting of two 30-ML tanks will be constructed at the Milne Port site. However, a modification requested for the Milne Inlet bulk fuel storage facility, dated June 2011 and approved by the NWB on August 12, 2011, indicates that the tank-farm will consist of four 10-ML tanks, one 5-ML, and one 3- ML tank. It is recommended that confirmation be provided on the number of fuel tanks that will be installed at the Milne Inlet site.	Design has been revised - refer to Vol 3, App 3B, Attachment 9 (drawings for Milne Port)
	Volume 6: Terrestria	al Environment
161	Section 2.1.4.1, Pg. 25, states that the current mine plan includes encapsulating Potential Acid Generating (PAG) rocks within the core of the waste rock pile, and that based on the Metal Leaching/Acid Rock Drainage (ML/ARD) study conducted, encapsulation appears to be a viable option for minimizing any metal ML/ARD effects on the environment. However, additional geochemical studies including kinetic testing are continuing to evaluate and refine this option. It is recommended that information on alternatives to encapsulation be provided should further evaluations determine that encapsulation would not produce the required and/or desired runoff quality. The results of the continuing studies should also be provided once available.	Vol 3, App 3B, Attachment 5 - Waste Rock



Item		FEIS Section
162	Section 2.1.4.2, Pg. 26, states that a screening level ML/ARD assessment completed on quarries and borrow pits along the existing Milne Tote Road determined that proposed quarries and borrow pits along the area appear to have a low potential for ML/ARD and are therefore suitable as quarry or borrow sources. However, the density sampling conducted is insufficient and more sampling is planned. It is recommended that the timeline for conducting additional density sampling and results, once available, be provided.	Noted
163	Section 2.4.2, Pg. 48, states that no major eskers or wetlands within the Local Study Area (LSA) will be affected by the project. It is suggested that this section be expanded to include information on the factors used in determining what a major esker or wetland is. Information on wetlands not considered as being major should also be included.	Vol 6, Sec 2.4.2 & App 6D - Ecological Land Classification
	Volume 7: Freshwat	er Environment
164	Section 1.2, Pg. 3, states that the methodology used assumes that an impact to freshwater may be fully mobile and able to move both upstream and downstream but the impacts are confined to the water and therefore cannot move from one watershed to another. An explanation should be provided as to the types of impacts being referred to and how those impacts are going to be confined to the initial watershed; even though, water is transferred between watersheds, from the perspective of contaminants.	Text removed as each instance of water diversion is addressed seperately and a zone of influence defined for each contaminant source



Item		FEIS Section
165	Section 1.2, Pg. 3, states that one baseline monitoring station located on a tributary of Phillips Creek monitors one-quarter of the entire Phillips Creek watershed, which is 900 km2. It is assumed that because of similar watershed characteristics, the estimated annual distribution of stream flow can apply to the entire Phillips Creek watershed. It will be helpful to confirm whether the watershed characteristic is similar or consistent throughout the entire Phillip Creek watershed and the extrapolation made for using data for the Mean Annual Unit Runoff (MAUR) obtained from one monitoring station is justified.	Vol 7, Sec 1.2 (Milne Port)
166	Section 2.2.4, Pg. 19, refers to a storm water management plan that will be developed for the Mary River Freshwater RSA to address runoff from non-key areas including lay- down areas, camps, airstrip and other mine use areas. It is suggested that a storm water management plan be developed for other areas as well.	Vol 3, App 3B, Attachment 5 - Surface Water and Aquatic Ecosystem Management Plan has been updated
167	Section 3.1, Pg. 112, refers to baseline data obtained for surface water and sediment quality prior to future development. However, during the baseline sampling program, it was not possible to collect data that could reflect pre-disturbed state in areas affected by the Milne Inlet Tote road Bulk Sampling Program associated infrastructure including wastewater treatment and discharge, water abstraction, etc. It is recommended that the information be provided on whether or not any analyses have been carried out to determine the extent to which the data collected differ from data that would have been obtained under pre-disturbed conditions.	The available database enables a comparison to be made between the existing (pre-Project) condition and the potential future condition. It is not possible to speculate as to the "predisturbance" condition, nor would it be relevant to effects predicitions.



Item		FEIS Section
168	Section 3.4.3.1, Pg. 145, indicates that given limitations in mitigation measures it is anticipated that total suspended solids (TSS) loading will occasionally exceed the CCME threshold of +5 mg/L relative to baseline conditions. It is also suggested that in the likely event that the effects of increased TSS coincide with freshet conditions, the magnitude of the potential effect will be mitigated due to added buffer capacity. It is suggested that actual measures proposed for implementation to prevent and/or mitigate exceedences be provided.	Vol 3, App 3B, Attachment 5 - Surface Water and Aquatic Ecosystem Management Plan, Sec 4.0
169	Section 3.4.3.1, Pg. 156, states that given the limitations of mitigation measure, it is anticipated that uncontrolled discharges of water from quarries and borrow sources may occasionally exceed applicable CCME thresholds. However, the excedences are likely to coincide with freshet conditions during snow melt, which will likely mitigate potential effects. It is suggested that the proponent provide information on how these elevated levels of contaminants will be addressed not accounting for dilution factors associated with freshet.	Vol 3, App 3B, Attachment 5 - Surface Water and Aquatic Ecosystem Management Plan & Vol 3, App 3B, Attachment 6 - individual Quarry Management Plans
170	Section 3.4.3.2, Pg. 176, mentions that an alternative that is being proposed for the project to deal with runoff water is to construct storm water management ponds over the permafrost, which would provide a hydrogeological barrier that prevents vertical seepage from occurring and preclude the movement of mine contact water into the groundwater below the permafrost. It is suggested that details on the size, structure and treatment methods, and possible discharge points be provided.	Vol 3, App 3B, Attachment 3 (project wide documents) & Attachment 4 (site specific documents)



Item		FEIS Section			
Other Plans (p33)					
171	Monitoring Plan - Sections of the various management plans under Appendix D in the DEIS address monitoring requirements for water use and waste disposal in a limited way. It is recommended that a comprehensive, stand-alone monitoring plan be submitted with the FEIS to address monitoring requirements specific to water use and waste disposal activities.	Vol 3, App 3B, Attachment 5 - Environmental Monitorin Plan			
	Design Drawings and Operation and Maintenance (O&M) Plans				
171	Conceptual and preliminary design drawings were submitted for some of the facility proposed in the DEIS. As part of the water licence application, the NWB generally requires for-construction drawings stamped and signed by an Engineer for all facilities associated with the use of water and the deposit of waste into water.	As discussed with NWB, drawing are issued for permitting puposes (stamped by engineer). Construction drawings will be submitted when detailed design is further advanced. At the request of the NWB, Baffinland can also submit as built drawings.			
172	In addition, an Operation and Maintenance (O&M) Plan for each of the relevant facility identified in Table 3-2.1, Section 2.17, Volume 3, of the DEIS, should accompany the application.	Vol 3, App 3B, Attachment 5 - Waste Management Plan provides O&M Plan for incinerators, landfill and landfarms; Freshwater, Sewage and Waste Water Management Plan provides O&M overview for Potable Water Plant (Sec 7.1), Sewage Treatment Plants (Sec 7.2) and Oily Water Treatment Plants (Sec 7.3 and 7.4)			