EXECUTIVE SUMMARY

BC Ecosphere Management Ltd. (BC Ecosphere) was retained by the 'Namgis First Nation (NFN) and Indigenous and Northern Affairs Canada to (i) Update the 2011 Phase I ESA completed by Stantec in 2011 for Alert Bay I.R. No. 1, Alert Bay I.R. No. 1A, Nimpkish I.R. No. 2, and (ii) Conduct a Phase I ESA of Ches-la-Kee I.R. No. 3, Ar-Cee-Wy-Ee I.R. No. 4, Osaw-Las I.R. No. 5, Ksui-La-Das I.R. No. 6 and Kuldekduma I.R. No. 7. The objective of the Phase 1 ESA was to identify past and present land use that may have resulted in the contamination of 'Namgis First Nation lands and which may require further investigation, remediation and/or risk management in accordance with applicable Federal contaminated sites management regimes. The object of the Updated Phase I ESA was to identify land uses that have occurred since 2011, when the last Phase I ESA was completed, that may have resulted in the contamination of 'Namgis First Nation lands and which may require further investigation, remediation and/or risk management in accordance with applicable Federal contaminated sites management regimes.

The Phase 1 ESA included a review of available historic information, interviews and a site reconnaissance conducted in general accordance with guidance provided by the Canada Mortgage and Housing Corporation (CMHC) Phase 1 Environmental Site Assessment Criteria (CMHC, 1994), Canadian Standards Association (CSA) Standard Z768-01 and Section 58 of the British Columbia Contaminated Sites Regulation (CSR).

Alert Bay I.R. No. 1A has historically been used for residential, agriculture, commercial, and industrial purposes. The western portion of the Alert Bay I.R. No. 1A has been undeveloped and/or used for forestry activities (logging) since at least the early 1950s. The majority of eastern portion of the Site has been used for residential and agriculture purposes from at least to the early 1950s to the late 1960s. Alert Bay I.R. No. 1 has historically been used primarily for residential purposes since at least the early 1950s. The western portion of the Alert Bay I.R. No. 1 (shoreline) has been used for residential purposes since at least the early 1950s with some commercial activities (tourist shop and a now-closed restaurant). Prior to 1970, forestry occurred on large section of the eastern portion (inland) of Alert Bay I.R. No. 1 but from the late 1970s to the mid 1990s, there was increased residential use in the eastern portion of the Bay I.R. No. 1A.

Nimpkish I.R. No. 2 was the site of the former St. George Hospital, a cemetery and a collection of totem poles. A now dilapidated ship slipway has occupied the southeast corner of Nimpkish I.R. No.2 since at least the early 1950s.

The ancestral villages of the 'Namgis First Nation were found on the banks of the Nimpkish River at sites on the Ches-la-Kee I.R. No. 3, Ar-Cee-Wy-Ee I.R. No. 4, Osaw-Las I.R. No. 5. They were occupied up until the fishing industry flourished at Alert Bay at which time these village sites were abandoned and since then are occasionally used as fishing stations, and/or for recreational and ceremonial endeavours. While there is evidence that logging once occurred on Ches-la-Kee I.R. No. 3, there is no evidence that logging occurred on Ar-Cee-Wy-Ee I.R. No. 4 or Osaw-Las I.R. No. 5. There are no

indications that logging has occurred on t Ar-Cee-Wy-Ee I.R. No. 4, Osaw-Las I.R. No. 5. A rail bed to transport logs to tidewater was reported to have been constructed on Osaw-Las I.R. No. 5 but it is unclear if there was ever any rails installed and the line ultimately used for log transport. A small land-based aquaculture plant occupies a small area in the southwest corner of Ches-la-Kee I.R. No. 3.

Approximately 1000 persons reside on Alert Bay No. 1 and Alert Bay I.R. No. 1A. In 2011, there were 205 dwellings on Alert Bay No. 1 and Alert Bay No. 1A, of which 155 were older than 10 years. For the most part, the dwellings on Alert Bay No. 1 and Alert Bay No. 1A are in good condition.

The Village of Alert Bay borders Alert Bay I.R. No. 1 on its southern and southern eastern borders. With the exception of a biocell and the auto repair facility, adjacent and nearby land uses of the Village of Alert Bay are unlikely to have impacted the environmental condition of the 'Namgis First Nation's reserve lands.

Based on the findings of the Phase 1 ESA, there are no APECs identified on the Reserve lands of Chesla-Kee I.R. No. 3 Ar-Cee-Wy-Ee, I.R. No. 4, Osaw-Las I.R. No. 5, Ksui-La-Das I.R. No. 6 and Kuldekduma I.R. No. 7. The following Areas of Potential Environmental Concern (APEC) were identified on the Cormorant Island Reserve lands of the 'Namgis First Nation:

- APEC 1: Cemetery Alert Bay I.R. No. 1A
- APEC 2: Suspect Subsurface Contaminated Soils and Surface Ponded Water, Atli St. -. Alert Bay I.R. No..1
- APEC 3: Aboveground Fuel Storage Tanks (ASTs) various locations Alert Bay I.R. No. 1 & Alert Bay I.R. No. 1A
- APEC 4: Nurses' Residence, Former St. George's Hospital Nimpkish I.R. No. 2
- APEC 5: Aerodrome Hanger Hazardous Materials and Waste Storage, Alert Bay I.R. No. 1A

In addition the following were identified as off-Reserve APECs

- APEC 6: Biocell Village of Alert Bay. adjoining Alert Bay I.R. No. 1
- APEC 7: ASTs and Auto Repair Shop, Front St., surrounded by Alert Bay I.R. No. 1

Sites that are identified through records review, e.g., 2014 Phase II ESA, and site reconnaissance as area(s) of environmental concern (AEC) are as follows:

- AEC 1: DLC Waste Disposal, Burning and Suspect Fill/Soil Materials
- AEC 2: Former Community Landfill
- AEC 3: Public Works Yard
- AEC 4: Sawmill on Alert Bay I.R. No. 1A.
- AEC 5: Underground Fuel Storage Tank, 20 Front St.
- AEC 6: Aboveground Fuel Storage Tanks (ASTs) at 106 Broughton St. & 03 Front St.
- AEC 7: Marine Slipway, Nimpkish I.R. No. 2.

Sites that were identified as AECs but are considered to have been remediated but for which no confirmatory sampling records or reports to that effect were provided or reviewed are:

- AEC 8: Vehicle Repair and Maintenance at a residence at the northwest corner of Broughton St. and Boundary Rd. Alert Bay I.R. No. 1A. It is reported that hydrocarbon-contaminated soil was removed from this site in 2014. No documentation was provided by INAC or the 'Namgis First Nation to confirm this report. Documentation should be located and or created to affirm this site's remediation. The site reconnaissance observed that vehicle repairs and maintenance appear to no longer be undertaken on the site. The site is also on the Federal Contaminated Sites Inventory (FSCI).
- AEC 9: The Former St. George's Hospital medical waste incinerator site and hydrocarbon remediation site is still listed on the Federal Contaminated Sites Inventory (FSCI). BC Ecosphere is aware that in association with an Addition to Reserve process for I.R. No. 2, these sites were remediated (i.e., excavation and off-site disposal) prior to the 2011 Phase I ESA. No records of this remediation was provided by INAC or the 'Namgis First Nation. These records should be located and provided to the 'Namgis First Nation for their files and be used to remove this site from the FCSI.
- AEC 10: UST remediation near the present-day gas station. This site was identified as an APEC in the 2011 Phase I ESA (see APEC 1-E). Two (2) USTs were located near the present gas station found on Alert Bay I.R. No. 1A. The 2014 Phase II ESA confirmed that groundwater concentrations of dissolved manganese were above Health Canada DW guidelines (aesthetics). For BC CSR 's health-based guideline, concentrations in water were below the BC guideline. The Phase II ESA recommended completion of a Screening Level Risk Assessment.

There are no AECs identified on the Reserve lands of Ches-la-Kee I.R. No. 3 Ar-Cee-Wy-Ee, I.R. No. 4, Osaw-Las I.R. No. 5, Ksui-La-Das I.R. No. 6 and Kuldekduma I.R. No. 7.

In addition to further investigation of the APECs and the AECs 's, BC Ecosphere also recommends the following:

- Undertake an AST Inventory in the community of tanks both in use or no longer in use, and
 integrate this information into the 'Namgis First Nation's land management system. Those ASTs in
 use should be inspected for structural integrity and observed for evidence of leakage or spillage to
 the ground. Tanks no longer in use should be emptied, if not already, and all fuel lines and the tank
 decommissioned and disposed of in accordance with federal requirements and the relevant Code
 of Practice.
- Develop and implement a Solid Waste Management Plan, which addresses, in the short term, the removal of all existing DLC waste solid waste from the community, and in the long-term, a plan, process and resources to avoid the recurrence of environmentally unsafe solid waste practices on 'Namgis First Nation Reserve lands.
- Develop a Soil Management Policy, Plan and Procedure for the acceptance, deposition and placement of fill on 'Namgis First Nation Reserve lands.

• Former Petro Canada bulk plant behind the Church. Pipes from the former plant have been observed and community has not been given any information that the bulk plant was fully decommissioned. Efforts should be made to determine the closure status of the site with BC MoE and/or Petro Canada.

This executive summary has been prepared to provide a general overview of this project. The reader should not rely on it for any purpose except for which it was prepared. Only the full report should be relied upon for information regarding findings and recommendations.