

Construction of Port Infrastructure for the Nunavik Nickel Project Questions and Comments from COFEX-N

To conduct its review, COFEX-N examined the following documents:

March 8, 2012. Correspondence from Canadian Royalties to Jean-François Coulombe (MDDEP) and Benoît Théberge (COFEX-N). *Nunavik Nickel Project, Canadian Royalties Inc. Environmental Assessment – Construction port Infrastructure - Addenda 1- Sediment Impoundments*

Genivar. 2011. *Construction d'un quai pour les activités de Nunavik Nickel, dragage et immersion en mer, baie Déception*, Environmental Assessment. Report by GENIVAR to Canadian Royalties Inc. 158 pages + appendices

General comments

On the basis of the information provided to date, it is unclear to COFEX-N whether on-land management of sediments is, in the end, actually preferable to ocean disposal. More details and explanations are required.

The proponent must provide new sediment management scenarios and/or provide all information required to assess all options and sites currently under consideration.

Q1 Provide the reasons and justification as to why the work is planned for the summer rather than the fall, given the constraints and limitations (ref. mitigation measures page 140 of the EIS).

Q2 An updated project schedule will have to be provided, clearly indicating the restricted periods.

Q3 The study area defined in the EIS of December must be revised and adjusted on the basis of the new land sites considered and the influence zone.

Q4 COFEX-N would like to have summaries of all public consultations held by the proponent, in order to be informed of the concerns raised by the residents. The proponent will have to specify how it intends to take the residents' concerns into account.

Q5 The EIS submitted in 2011 refers to information provided in the 2007 EIS. COFEX-N requests a copy of the 2007 EIS so that it has all of the information it needs to assess the project. *(This information was already sent by the proponent but is one of the issues emerging from the analysis by COFEX-N.)*

Characterization of the receiving environment

Q6 The biological characterization surveys are inadequate; they were not conducted on optimal dates or using optimal methods (e.g. aquatic grassbeds in winter (March 2008), a single lobster trap on a single night for the ocean disposal sites in 2007, dive and video surveys in October and November 2011). If no additional field surveys are planned, present a survey based on existing documents and references. This information should also be presented for ocean disposal sites IM-1 and IM-4.

Q7 The results of the dive and video surveys of 2011 are not described in the December 2011 report. The video surveys reportedly demonstrate the richness of the environments of the disposal sites, particularly the presence of soft corals. Owing to the presence of these organisms, Fisheries and Oceans Canada (DFO) has found site IM-2 to be unacceptable for the disposal of dredged sediments. The videos should be accessible to the members of COFEX-N.

Q8 Table 6.12 on plant and animal species is very unclear (presence-absence vs. density). Provide an interpretation of the data in this table.

Q9 The sampling effort was inconsistent between wharf sites and disposal sites. Is species richness and diversity actually higher at Q-2? Please explain.

Q10 In Table 6.16, specify the species harvested by the residents.

Q11 Provide a justification for the decision to conduct modelling rather than perform additional surveys of currents (ref. p. 148).

Q12 The baselines and protocols for the monitoring of grassbeds and site recolonization should also be submitted to COFEX-N prior to the commencement of monitoring.

Blasting and construction activities

Q13 It is unclear whether blasting will be done in the terrestrial or aquatic environment. For example, in section 8.5.2 on mitigation measures, measures B11 and B12 indicate that blasting activities are prohibited between May 15 and July 15, but it is not stated whether measure B11 deals only with the terrestrial environment or whether it includes the aquatic environment. Similarly, measure B13 states that blasting will be done during this restricted period, with two blasts per week. Provide clarifications on this aspect.

Q14 How will measure B11 concerning migratory birds be applied? Provide the protocol that will be used to implement this measure.

Q15 Given that the preferred option for the wharf site in the current project is site Q2, it would be appropriate to superimpose the proposed port infrastructure on the maps of site Q2.

Sediment management

DFO has determined that the placement of 200,000 m³ at site IM-2 was unacceptable given the documented species richness of the site. With respect to ocean disposal at the other potential sites, the information provided by the proponent is insufficient to allow DFO to make a determination on the acceptability of sediment disposal at these sites. DFO recommends the use of the precautionary principle and assumes that species richness at the other sites is just as high as that documented at site IM-2. However, it is unclear to COFEX-N that on-land management of sediments is the best option, given that the characterization of the other disposal sites initially considered is incomplete. COFEX-N does not have the information required to be able to take a position on this point.

Q16 Explain the large difference in the projected volumes of sediment to be dredged and disposed of in 2007 and 2011 (200,000 m³ vs. 35,000 m³)?

Q17 The proponent must provide a detailed characterization of the biophysical and human environments of the on-land disposal sites evaluated and presented in the letter of March 8, 2012.

Q18 What option does the proponent recommend? If the site proves not to be functional, the scenario contemplated is unclear. Will sites 1 and 4, or 1 and 3 be used, or only site 4? The members of COFEX-N would like details on the site selection criteria and rationale.

Q19 Is disposal site 4 located on an esker, a geological formation that COFEX-N asked the proponent to avoid in 2008? Please confirm and, if so, provide a rationale for this option.

Q20 Explain or correct the various excavation templates proposed at the various on-land sites. Site 1: from 117 m to 6 m, Site 3: from 22 m to 7 m, and Site 4: from 107 m to 102 m.

Q21 In the EIS, the proponent mentioned that the on-land sediment management option could not be considered for economic reasons and because it was impractical and difficult to justify. Given the change in the proposed management approach, the proponent should present a comparative analysis of the various options considered (disposal sites IM-1 and IM-4 and on-land sites) based on environmental, economic and technical criteria. In the analysis, the proponent should explain its rationale for selecting the option it did.

Q22 The impact assessment of on-land management of sediments is very limited and will have to be expanded upon. Specifically, the proponent must assess the potential social impacts of on-land management if, for example, site 4 were used (site location, landscape, etc.).

Q23 The assessment of the impacts of on-land disposal was not provided. The proponent must also assess the impacts of the infiltration of saltwater into the soil, particularly if site 4—which is further from shore—is used. For example, what are the impacts of the presence of saltwater sediments on plant and animal life at the on-land disposal sites?

Q24 For the on-land scenario, assess the impacts of transporting the sediment from the dredging site to the disposal site and describe the proposed mitigation measures.

Cumulative effects

Q25 The construction of two wharves in the bay, rather than a single wharf shared by Xstrata and CRI, is clearly a significant adverse cumulative effect and is avoidable. The proponent must evaluate the cumulative effects associated with the presence of two wharves and other infrastructure.

Q26 Given the cumulative effects of the presence of two wharves, particularly in terms of the significant quantities of sediment to be managed and the infrastructure maintenance required, did the proponent consider negotiating an agreement with Xstrata for the shared use of the existing marine infrastructure, including the possibility of expanding the wharf to accommodate the activities of the two companies?

Q27 In the absence of such an option and in the event of a scenario that would see the construction of a new wharf, are there plans to allow other users access to the marine infrastructure?

Q28 In the initial project, the landing strip was to be shared with Xstrata. What is the current situation in this regard? Provide details on any agreement reached between the two companies on the shared use of the landing strip.

Other

Q29 The proponent must assess the impacts on Inuit use of the land.

Q30 The proponent must include wharf operation and maintenance activities in its impact assessment, including the impacts of navigating in ice-covered waters. If the information is provided in the 2007 EIS, the proponent should refer us to the appropriate sections.

Q31 The proponent must provide details on the event that occurred in the summer of 2011 (landslide). Is it possible to provide a summary report of the event including: the time and duration of the event, and describe the factors that caused the landslide?

Q32 Were any warning signs that might suggest a similar event in the near future identified?

Q33 What was the situation at the time the landslide was discovered (during the work)? What corrective action has been taken since the landslide? This information would provide a context for reviewing the current application, in the absence of a more formal report of environmental monitoring since the start of work.

Q34 Does the proponent plan to implement corrective measures at the landslide site? If so, provide the plan of the measures, including the proposed implementation schedule.

Q35 Were the impacts of climate change taken into account in the design of the infrastructure, specifically with respect to rising sea levels and storm surges? Provide details on how climate changes were taken into account and the basis on which the final design decision was made. The members of COFEX-N would like to receive the proponent's assurances that it has assessed the risks posed by climate change.