

**Proposed Pebble Project
Preliminary Draft Environmental Impact Statement
Review Comments**

Reviewer: NARF Technical Team
Date: December 21, 2018
Chapter: Chapter 4: Environmental Consequences
Section: Section 4.15 Geohazards
Document: Sec4.15_Geohazards_reviewdraft_2018.11.09

Comments

To conduct a substantive and meaningful review of this section, the review of Appendix K Section K4.15 is required. Appendix K4.15 in turn references several additional documents which need to be reviewed. For example, PLP 2018d, PLP 2018-RFI 006, 006a, PLP 2018-RFI 010, Knight Piésold 2018a, and PLP 2018-RFI 008f is a partial list of documents referenced. The list that the reviewer would actually need to construct to represent the document needs for this entire section is much longer. In addition, none of the tables or figures for Appendix K4.15 were included in the preliminary draft environmental impact statement (EIS) for review.

Substantive and meaningful review and comment on this section requires a high-level of expertise and diligence, and with all information available, it would require a minimum of 40 hours of dedicated time. This review is a critical component of the EIS analysis; therefore, prior to the production of the public draft EIS, an allowance of time should be given to cooperating agencies to obtain and review all referenced information and conduct an independent analysis

This section appears to have an inappropriate focus on damage to project facilities, which are only of importance to the extent that this may impact elements of the environment. Any impacts to elements of the environment related to geohazards as a result of damage to project infrastructure should be discussed in this section and not spread around among other sections so that a reader has to move back and forth between sections to read about all the impacts from a large earthquake or other geohazard of concern. For example, it is not appropriate to discuss the environmental impacts of embankment failure due to an earthquake in the Spill Risk section. Spills are caused by human error, while embankment failure not caused by design flaws would be due to geohazards and should be discussed here.

Missing from the bullet items appears to be a discussion of damage to the underwater natural gas pipeline due to movement of boulders on the seafloor. This has occurred with existing oil and gas infrastructure in Cook Inlet.

Any discussion of mitigation, particularly that which is not already described in the permit application as being part of the project design, should be offered by the project applicant in Appendix M, Mitigation, rather than being discussed in this section, where it would be purely hypothetical.