

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

Reviewer: NARF Technical Team
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Chapter: Chapter 3: Affected Environment
Section: Section 3.13 Geology
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Comments

Section 3.13.4 Alternative 1 – Applicant’s Proposed Alternative. 3.13.4.1. Mine Site.

Colluvium is to some extent self-defined and a common geologic term. The geologic term *Felsenmeer*, coming from German and meaning “sea of rock,” is used to describe exposed rock surfaces that have been quickly broken up by frost action so that much rock is buried under a cover of angular shattered boulders. While common to arctic conditions, the term is not common to most geologists and others familiar with mining projects and therefore should be described further.

Construction Materials. This subsection describes the construction materials as “suitable for use as rockfill” but does not describe what properties make them suitable. The section should be more descriptive and address what the physical and chemical characteristics of the rockfill materials are in terms of “suitability.” In numerous instances construction materials used in mining projects, because they were not adequately characterized (such as for acid drainage or even nitrogen from blasting in some cases) have led to significant adverse impacts that required additional mitigation to meet regulatory requirements and prevent environmental degradation. This same comment is pertinent to other descriptions of construction materials throughout Section 3.13.