

26.0 RULE 6.5: GEOTECHNICAL STABILITY

(1) On a site-specific basis, an Applicant shall be required to provide a geotechnical evaluation of all geologic hazards that have the potential to affect any proposed impoundment, slope, embankment, highwall, or waste pile within the affected area. A geologic hazard is one of several types of adverse geologic conditions capable of causing damage or loss of property and life. The Applicant may also be required to provide a geotechnical evaluation of all geologic hazards, within or in the vicinity of the affected lands, which may be de-stabilized or exacerbated by mining or reclamation activities.

(2) On a site-specific basis, an Applicant shall be required to provide engineering stability analyses for proposed final reclaimed slopes, highwalls, waste piles, embankments, and ore leach facilities. An Applicant may also be required to provide engineering stability analyses for certain slope configurations as they will occur during operations, including, but not limited to, embankments and ore leach facilities. Information for slope stability analyses may include, but would not be limited to, slope angles and configurations, compaction and density, physical characteristics of earthen materials, pore pressure information, slope height, post-placement use of site, and information on structures or facilities that could be adversely affected by slope failure.

(3) Where there is the potential for off-site impacts due to failure of any geologic structure or constructed earthen facility, which may be caused by mining or reclamation activities, the Applicant shall demonstrate through appropriate geotechnical and stability analyses that off-site areas will be protected with appropriate factors of safety incorporated into the analysis. The minimum acceptable safety factors will be subject to approval by the Office, on a case-by-case basis, depending upon the degree of certainty of soil or rock strength determinations utilized in the stability analysis, depending upon the consequences associated with a potential failure, and depending upon the potential for seismic activity at each site.

(4) At sites where blasting is part of the proposed mining or reclamation plan, the Applicant shall demonstrate through appropriate blasting, vibration, geotechnical, and structural engineering analyses, that off-site areas will not be adversely affected by blasting.

Geotechnical stability analysis with respect to the FTD is presented in **Appendix 4-2, Exhibit D**.