**Risk could escalate during transition from ‘care and maintain’ to ‘active closure’ –Owners beware**

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# ABSTRACT

When a Tailings Storage Facility (TSF) closes operation, there is likely a time gap between the stoppage of operations and commencement of active closure. This gap could be between few months to multiple years. This gap is typically mentioned as a state of ‘care and maintain’ when the asset may lose surveillance from the operations team. All engineering input and asset maintenance are also likely to be reduced significantly during this stage.

When active closure commences on the asset, the author has noted three possible changes: (A) the asset gets transferred to a different asset owner team (e.g. closure or rehabilitation team); (B) the asset closure design is undertaken by a different designer (different from the engineer responsible for the asset development design); and, (C) as preparation of closure construction and profiling, material movements (e.g, storage of closure material on top of TSF/ around the TSF) occurs.

While Changes A and B enhances risk due to knowledge discontinuity, however, a key area the author would like to focus in this paper is the linkage between storage of closure material inside TSF footprint and integrity of the embankment. This is critical as construction material, when stored within the zone of influence of slope circle of the embankment, could create additional destabilizing force and may lead to slope instability and failure of the embankment. This could be more critical to the upstream raised TSFs. The author would also like to present thoughts on how such risk can be alleviated and where Global Industry Standard on Tailings Management (GISTM) can assist in attaining a safe closure construction without compromising on asset integrity.