

MONITORING FOR SETTLEMENT

Location and Identification of Backfill Settlement

Historically, areas of settlement in regraded pit backfill are discovered through any number of potential methods including: aerial photos, field studies (i.e., vegetation surveys), wildlife surveys, and random inspections. Upon discovery, settlement occurring in regraded but as yet unreclaimed areas (i.e., not topsoiled), will be further regraded until the settlement is ameliorated.

Where settlement is observed to be occurring in areas already reclaimed (i.e., topsoiled and seeded), the settlement features will be surveyed and mapped and recorded on relevant Reclamation Maps in Annual Mining Reports submitted to the Department each year. The Reclamation Maps will serve as the primary record for tracking the location of settlement areas in reclaimed pit backfill lands. Narrative will be provided in each year's Annual Mining Report describing any work completed during the reporting period to repair reclamation settlement.

Settlement Monitoring

SCC commits to monitoring each discrete settlement feature at least annually and providing narrative updates in Annual Mining Reports.

Settlement Repair

In general, settlement features in reclamation will be managed using the following approach:

Features less than 100 square feet in area and less than 2 feet deep will be monitored and not necessarily ameliorated. The likelihood of creating more disturbance to features of this size and smaller during the repair process is significant. Features of this size also pose little physical danger.

Features greater than 100 square feet or 2 feet in depth will be ameliorated. Possible repair methods include regrading using existing surrounding materials, import of additional backfill material, or a combination thereof. Topsoil will be conserved by stripping the area of topsoil prior to adding backfill material. SCC will use best management practices to minimize travel across existing reclamation and conduct the repairs during dry or frozen ground conditions. Areas disturbed for repair will be seeded in accordance with Section 313.

Settlement features located in stream channels that impact continuity of flow will also be ameliorated.

Settlement repair efforts will not require Department approval.

Amelioration will be conducted using suitable spoil or topsoil, depending on volume and location. For example, suitable overburden might be used in a large, extensive settlement feature (greater than 100 cubic yards in volume) and topsoil would be used where fill volumes are generally on the small side. In no case will unsuitable overburden be used where that material would reside on the surface or otherwise impede revegetation efforts. Overburden suitability is defined by the Department's *Soil, Overburden and Regraded Spoil Guidelines, Updated August 1998 (or most recent version)*.