

to their loss to micro-benching then during establishment of revegetation plantings. Finally, the monitor will prepare annual restoration progress reports documenting both maintenance methods as well as visual and quantitative assessments of revegetation progress towards final performance standards.. The revegetation monitor will have a minimum of three years experience in restoration design, implementation, and monitoring. It is anticipated monitoring of the revegetation sites will be conducted for a maximum of seven years or earlier if these sites reach performance standards. Once performance standards are met, no further monitoring is anticipated. Three types of monitoring will be provided: 1) implementation monitoring, 2) qualitative (horticultural) monitoring, and 3) quantitative (biological) monitoring. Quantitative monitoring will commence when the qualitative evaluations indicate that vegetation cover appears to be approaching performance standards. Refer to the Revegetation Guidelines, Appendix 11, herein for more detail (CCR §3705(m)). The final result of site reclamation will be a permanent, self-sustaining vegetation cover on the recontoured slopes.

Performance Standards:

Test/ Reference Plots

5MARA §3705(b) requires test plots to be conducted simultaneously with mining to determine the most appropriate planting procedures for successful implementation of the revegetation plan. Since VMC has been working on revegetation of the slopes for an extended period under the existing reclamation plan, they have developed a sufficient body of knowledge to ascertain that the revegetation techniques they are using work at the site. Therefore, even though continuing observations and modifications will be made to adapt these revegetation methods to each successive phase of reclamation, VMC is not proposing to establish additional test plots for revegetation research.

However, VMC proposes to use these existing successful revegetation areas as reference sites against which to judge successful final revegetation for future reclaimed areas. This will be done by collecting data on vegetative cover, density, and species richness prior to the removal of vegetation on the sites during micro-benching. CCR§3705(a) allows for this use of onsite reference data where, as is the case at this site, the topography and topsoil quality of the reclaimed site will significantly differ from that found in surrounding natural vegetation cover.

Table 12 details performance standards developed to monitor the performance of the revegetated site. These standards and the remedial measures potentially implemented to address lack of performance are shown in Table 12 below.

Table 12: Performance Standards			
Type	Period	Standard	Remedial Measures
Container Plant Survival	Vr. 1-2	100%	Replanting of same or better adapted species