

Anticipating the True Costs of Mine Closure Reclamation¹

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Abstract: As mines approach their economic and/or commercial life, the importance of a realistic mine closure estimate becomes critical. Financing the final reclamation of mine sites requires identifying an extensive list of requirements in order to meet permit, state, and federal requirements, while also understanding the limitations of work in a post closure mine environment. Companies should desire an accurate estimate in order to properly finance reclamation and determine optimal closure timing scenarios. Typically, cost estimates are based on standard assumptions used for the determination of reclamation bond amounts or Asset Retirement Obligations; however, these assumptions often are found to be unrealistic in actual reclamation conditions. In addition, estimates need to be periodically updated to account for changing input costs and new requirements and technologies, like those of geomorphic reclamation. Drawing from experience gained in multiple mine closure projects across the United States³, this presentation will step through a typical reclamation estimate and detail the shortfalls that have been encountered with respect to grading plans, equipment fleets, labor force, monitoring, and other reclamation cost items. This presentation will prime mine operators to reassess their assumptions regarding their mine closure planning as well as look critically at closure funding to avoid shortfalls.

Additional Key Words: Reclamation Bond, Cost Estimate, Mine Planning, Permitting, Monitoring

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 3. Work Reported here was conducted in St Louis, MO with respect to various confidential mines across the US.