Attachment B

Tyrone Mine Life/Economics Information Related to July 2010 Waiver Application

Tyrone Mine Life Information Related to Interior Slope Reclamation

Over the past 7 years, Tyrone has taken aggressive steps to integrate reclamation with mine operations. Examples of this fact include removal of the 1C Stockpile from Oak Grove well ahead of the agreed-upon schedule using the majority of Tyrone's mining fleet and voluntarily accelerating reclamation of the following perimeter stockpiles and slopes of perimeter stockpiles: 1, 1C and 7A. Tyrone has also begun the process of exterior slope modification for reclamation purposes of the 1A, 2A, 2B and 4C Stockpiles. Tyrone has made significant progress on backfilling the South Rim and San Salvador Pits by hauling waste to these sites from active mining areas. These actions will allow these pits to be reclaimed, rather than pursuing a waiver for them. This pit backfilling would be economically infeasible to perform after mining needs and goals. Additional time and effort must be put into mine planning to achieve these environmental benefits and Tyrone has more than demonstrated its continued focus on reclamation concurrent with mining operations on a large scale.

These actions have led to some benefits to mining and reclamation. For example, some of the cover and riprap materials for the concurrent reclamation activities came from materials actively mined from the Copper Mountain Pit. The backfilling of the South Rim and San Salvador Pits is a benefit to both the mining operation and reclamation goals.

The aggressive approach to regrading (flattening) perimeter slopes has created some significant challenges to the ongoing flexibility of mining operations. This is a serious issue for mine economics that regulatory agencies should carefully consider. Flattening the exterior or interior slope of any stockpile greatly reduces the amount of waste or leach material that can be placed on these permitted facilities. Stockpile space now comes at a premium for Tyrone and because reclamation-related actions have been taken on the perimeter, Tyrone's flexibility and options for placement of mined materials is reduced. It is clear that the decision to be proactive on the integration of mining and reclamation has both positive and negative consequences from a business perspective. Tyrone's application for a waiver of interior stockpile slopes is much more significant than simply limiting future reclamation liabilities. This application is vital to Tyrone's future mining viability. The purpose of Attachment B is to provide a simplified illustration of the affect of the decision to grant a waiver on the interior slopes on Tyrone's mining business.

Tyrone mine planners have developed the following simplified approach to illustrating the impact of interior slope reclamation on mine economics. This issue has become amplified due to the proactive activities toward reclamation on the perimeter of the Tyrone Mine which have reduced the available space for storage of mined rock. Though this presentation is simplified, it is important to understand that reclamation and mine operations are completely interrelated and many complex issues arise in trying to balance the goals of business and societal/regulatory expectations.

The interior slopes that Tyrone is requesting a waiver for are outlined clearly on Figure B-1. The plan view projected area of these slopes is 462 acres based on their current configuration. For purposes of illustration, Tyrone calculated the total volume of leach stockpiles that are necessary to contain the ore for copper production purposes for the remaining life of mine at Tyrone given the current ore reserves. Tyrone compared the storage volume available if the interior slopes are built up at a 3:1 slope versus a 1.5:1 slope. Tyrone will build up the slopes at roughly 1.5:1 if a waiver is granted for these interior slopes. If they are required to be reclaimed (i.e., a waiver is not granted), then for reclamation purposes, Tyrone would raise these stockpiles with a 3:1 slope configuration to achieve something close to the final reclamation requirements. Significantly less volume is available for production purposes if the stockpile is raised at the flatter 3:1 slope configuration. Tyrone completed this analysis for all of the leach stockpiles associated with the interior slope waiver request which included Stockpiles 2A, 2B, 2C, 4A, 4C, 6B, 6C and Copper Mountain. Cross sections are presented on Figure B-2 for two of these key leach facilities (2A and 4A Stockpiles). The location of the cross sections are shown as Sections A-A' and B-B' on Figure B-1. The sections shown on Figure B-2 illustrate two potential configurations if built upwards from the top surface of the current leach stockpile. . The area shown in brown represents the configuration if both the exterior and the interior slopes must be graded to 3:1 for reclamation. The combination of the brown and blue areas represents the configuration if the exterior is graded to 3:1 and the interior is constructed for mine operational purposes at essentially a 1.5:1 slope. These illustrations clearly show the significant area that is eliminated from use in producing copper if a waiver is not approved for the interior slopes and they must be constructed at flatter slope for final reclamation.

The volume of material and the approximate lost revenues from eliminating this valuable stockpile space is presented in the table below. To estimate lost revenue, the volume of the material (converted to tons of material) was multiplied by the expected copper recovery per ton and that product was multiplied by an assumed copper value of \$2.75 per pound of copper. The analysis is based on the life of mine stockpile plan that utilizes all available, permitted leach stockpile space and some stockpile space that is not yet permitted (such as the Savanna Pit). In other words, there is no other permitted stockpile space where this material could be processed instead.

Leach Stockpile	Stockpile Volume	% Reduction in	Revenue Lost Due to	
	Lost Due to Interior	Stockpile Capacity	Reduction in	
	Slope Requirements –	Due to Interior Slope	Stockpile Capacity	
	No Waiver (tons)	Requirements		
2A	7,342,738	62	\$76,100,000	
4A, 2B, 2C,7B,	47,924,167	24	\$496,800,000	
Copper Mountain				
Total	55,266,905		\$572,900,000	

Table B-1	Stockpile St	orage Volum	ne Lost and	Economic	Cost
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Conclusions

Full utilization of the copper resource at Tyrone requires adequate space for leaching. The alternatives for providing this space are to leach on existing facilities until they are fully utilized, to convert inactive pit areas into leaching space, or to go outside of the existing footprint of the and build new leach space. A similar situation exists for the waste rock as well because it must be paced somewhere out of the way of future mining. It is Tyrone's belief that the best option from an environmental standpoint is to make the maximum use of the existing stockpile units by constructing the interior slopes at nearly the angle of repose. The second best option is to place future ore or waste into the inactive, existing pits. This option is already being utilized. The least favorable option is to develop new ore and waste storage areas thus disturbing new areas of native ground. The goal of full resource utilization at this mine is important. It not only optimizes economic benefits to New Mexico and its residents but, in a larger view, it globally reduces the total area of land surface that must be devoted to the production of copper. Since the amount of copper that occurs in the earth's crust at mineable depths is not infinite, it is prudent and conservative to not leave behind any viable resource that could be produced with minimal environmental impact.

A large part of Tyrone's request for a waiver of interior stockpile slopes is intended to preserve a significant part of Tyrone's future production potential as a business. Granting a waiver preserves the opportunity to process almost 50 million tons of ore on permitted leach stockpiles within the area of the mine that is already impacted by mining operations. The cost of being required to reclaim interior slopes of these stockpiles is not only the capital and maintenance costs of doing the reclamation, but would also reduce revenues from copper production by as much as \$573 million dollars. If those revenues were actually lost, the effects to the local and regional economies would be much larger than the impact of additional reclamation expenses.



