

GIANT

Yellowknife Mines Limited

MEMO TO: Sadek El-Alfy
CC: K. Blower, J.S. McAlpine
FROM: K. Morton
DATE: February 17, 1988
SUBJECT: COMBINED WET & DRY RECLAIM SYSTEMS

Summary

As you point out, the arsenic reclaim plant (ARP) could be built with only the dry recovery system, adding the slurry system later to be paid for out of revenues. This would result in capital cost reduction of approximately \$788,000, about 13.4% of the total.

There are a number of factors that should be considered however, and it is my opinion that retrofitting the slurry handling equipment would lead to revenue losses through production delays and increased capital costs overall.

Discussion

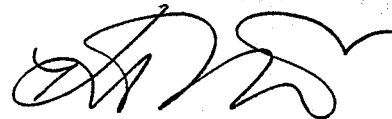
The planned reclaim sequence anticipates recovery from stopes 32-30 to 32-36 during the first six years of operation, an average of about 14 months per stope. Two of these stopes B2-30 and B2-33 contain saturated dust with very high gold values.

As each stope is depleted, final cleanup will be accomplished through washing down using high pressure water hoses. This could be as much as 25% of the total depending upon vacuum apparatus access and conditions of the stope floor. As washdown is taking place, the vacuum apparatus will be dismantled and relocated to the next reclaim site, maintaining continuity of operation. Perhaps under normal conditions, the slurry reclaim system would be located in stope B2-33, to be activated in case of breakdown or other delays of the vacuum reclaim system. Based on year 2 revenue projections, losses resulting from slightly over 3 weeks of production delays would exceed the capital cost of the slurry reclaim equipment.

Costs of retrofitting ^{are} as usually much higher than the costs of installing the same equipment during original construction. The plant can be built with expansion in mind, i.e., footings poured, space made available, structural steel, lighting, etc., designed for expansion, but if this approach is taken, at least some capital expense is incurred with no immediate benefit. Too, a significant portion of capital costs are in engineering controls such as plant design, procurement, construction management, etc. Reestablishing these controls for a plant expansion would result in higher capital costs through duplication of services that would otherwise have been included at very little incremental cost.

Conclusion

In view of the very short payback of this proposal (less than 1 year) I believe the value of the slurry handling system will quickly become evident and that original installation outweighs the temporary cost saving benefit of delaying installation of this equipment.



K. Morton
Technical Project Supervisor