

Notes of a meeting held in the Poker Room, Toronto, on February 21st, 1980. Present were: F. G. T. Pickard, L. S. Price, P. J. Raleigh, W. A. Moore and D. J. Emery.

We met to discuss various problems connected with the environmental end of things at Giant. Also, to discuss the arsenic upgrading project.

Pickard felt that ~~Cottrell~~^{Cottrell} dust will not fume well. Price, on the other hand, felt that the hot water leach method would solve the problem of handling ~~Cottrell~~^{Cottrell} dust due to the residue that would be produced. Centrifuge might help, and the sludge could be disposed underground. Pickard, on the other hand, felt that the leach method would remove 90% of the soluble arsenic from the ~~Cottrell~~^{Cottrell} dust. It was also suggested that the sludges could go into an open pit, or auxiliary pond.

Pickard suggested the ~~Cottrell~~^{Cottrell} residue could be put in after the carbon plant to get around the alkalinity problem.

We next discussed the alkaline chlorination method. It was generally agreed that we should use the DPAT method to solve the cyanide problem. The capital cost would \$884,000 and the operating cost \$436,000 per year (most of which would be for ~~baric~~^{peric} sulphate). By going the D-PAT route, we would be taking pressure the HSA project.

Moore noted that the ~~iron~~^{ion} exchange method was also being looked at. Pickard noted that we are looking for high efficiency filters, as they use less water. This may minimize the barren bleed~~(?)~~. He recommended strongly against getting a drum filter and suggested that picking up a horizontal belt filter. He stated solution losses are minimal with a belt filter, and the cost would be in the area of \$120,000. They don't require as much wash water.

We discussed arsenic sales. The price of arsenic of 7¢ FOB plant site was suggested. The contract could be for 1-2 years. Evidently, Koppers will take it at less than 90% purity. Moore noted that a load out in storage facility would be required at the cost of some \$150,000. He indicated that we need a decision by March, 1980, in order to get the equipment ordered and in on time.

We talked about the arsenic upgrading plant. The capital cost now looks like \$4.5 million. It may be possible to shave \$500,000 off this figure. Pat Raleigh stated the fuming possibilities still exist for underground storage and the Con material. All agreed that the hot water leach process ^{was} ~~with~~out for current production. It was also decided that we should experiment with fuming for underground and Con. It will require something like \$50,000 for lab tests.

I named P. J. Raleigh as coordinator of the project.

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