

Notes of a Meeting
Re Arsenic Sales
From 11:45 am to 1:45 pm
January 31, 1979

Com to WAM
P. Johannes
L. Huns +
M. Raleigh

Present were: W.A. Moore, K. Morton, L. Connell, P.J. Raleigh, D.J. Emery

Raleigh reported on his recent meeting with Koppers where he learned that they were not happy with the fact that our product assays more than .3% Fe which is not acceptable. The higher iron results in the formation of Fe arsenates that form a coating on wood being impregnated with the preservative. This causes an environmental problem for people handling the wood and OSHA is objecting to this hazard. An upgrading process is required. He noted that Koppers now feel it would cost something like 2 to 3¢ per pound of arsenic for reagents to make our product okay. In order for them to take our product, they essentially would want it for free. They are looking at a requirement of 3,000 tons per year. They would like to be a customer of preference.

Raleigh then went into the costs of putting in an upgrading plant at Giant. The rough figures show that the capital costs would be approximately \$0.5 million exclusive of building on any changes to the roaster to treat approximately one ton per hour of the arsenic dust.

If we are to consider the Con material, a slurry truck would be necessary to deliver it to a holding tank at Giant. It would then go into a heating tank with submerged heaters, and then into a leaching tank. This would be followed by drying of the product. During his discussion, PJR made reference to a report on the proposed system.

ECONOMICS

He then went into the economics of the process.

Giant

Capital (less buildings and roaster adjustments)		<u>\$500,000</u>
Operating costs:		
labour (450 man-shifts @ \$20,000/man/year)	\$ 80,000	
supervision	25,000	
maintenance and spare parts (5% of capital)	25,000	
fuel (1¢ per pound of arsenic produced)	60,000	
power	75,000	
overheads	35,000	
Total Operating Costs	<u>\$300,000</u>	
Revenue:		
Arsenic (6 million pounds, 99% pure at 25¢ per pound, less 11¢ for transport, less 2¢ miscellaneous)	\$660,000	
Gold (90% recovery on \$225/ounce less \$25 per ounce cost of recovery)	67,500	
Total Revenue	<u>\$727,500</u>	
Net Earnings		<u>\$427,500</u>

(ie. a rate of return of about 60%)

Con

Revenue:

Arsenic

\$500,000

Gold

\$500,000

Net:

\$700,000

It would therefore appear that the combined Giant-Con operation would net come-thing like \$1,127,000.

We next discussed markets. Boliden is looking for 4,000 tons per year and Koppers 3,000 tons.

Next followed a discussion on the future steps. Raleigh suggested setting up a pilot test of treating the gold residues. He suggested getting a bigger sample from Con to see what is required. The arsenic leach method is well tested as it has been used in other locations.

There was some consideration of timing. WAM pointed out that within 14 months we would require additional storage at Giant. It was also noted that Con is under some pressure because of their water license and that with delivery problems WAM couldn't see us getting this on the road within twelve months.

It was agreed that the project looked practical on the basis of the numbers presented and DJE suggested we should follow-up on it. First meet with Con to see what their desires are without getting into any indication as to the split on the gold. It would be important also to have it agreed that they would take on the responsibility of delivering the material to us. WAM brought up the problem that might occur if we had to shut down before the material in their storage area was used up. Raleigh noted that if we were to close in five years, it would probably only take another couple of years to complete the Con project and that we would have an escape clause to let us get out of it if it wasn't viable on it's own.

WAM, PJR, and Kent Morton went up to meet Dave MacPhail, Manager and Jim Gowans, Mill Superintendent of Con at 1:45 pm.



D. J. Emery

/vb