



To: D. J. Emery

Subject: Updated R.O.I. Calculations for Investment in a 'Hot Water Process' to Produce Refined As₂O₃ for Sale to the Market.

Date: March 29, 1979

INTER-OFFICE MEMORANDUM

From: D. N. Zeraldo

Copies to: TJD, PJR, DNZ, File

Provided on the attached page in tabular form are updated computations for:

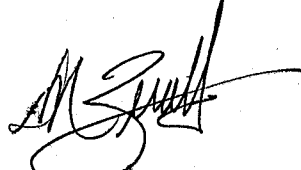
- (a) The mine netback(s) from projected As₂O₃ sales to each consumer, and
- (b) The projected return on investment to Giant.

Please note that these calculations have been carried out on the following bases:

- 1) Giant will market its product at a price competitive with Asarco's Tacoma price f.o.b. buyers' plants.
- 2) An estimated capital cost for installing the 'hot water refinery' of \$US 900,000 and a plant operating cost of \$US 100/ST.
- 3) Approximate cost of trucking product to consumers' plants as quoted recently by Trimac Transportation System Ltd.
- 4) No allowance in the calculations for: (a) the possible revenues from sale of the gold bearing residue generated by the refining process; and (b) mine operating cost savings in no longer having to dispose of 3,000 ST/year of baghouse dust in underground stopes.
- 5) A two year project life commencing January 1, 1980 and concluding December 31, 1981, after which Giant would have recovered its capital investment and earned an outstanding return on its investments.

Also find attached copies of letters of interest by each of the major consumers of arsenic trioxide in the U.S. Perhaps this information will be helpful to you in preparing for the April 10, 1979 presentation to the Giant Yellowknife Board of Directors.

DNZ:d1k


D. N. Zeraldo

1. Table I - Project Giant Mine Netbacks From As₂O₃ Consumers

Approx. SDT Saleable by Giant	Consumer	Consumer Location	Asarco f.o.b. Tacoma Price US¢/lb	Bulk Rail Frt. to + Consumer US¢/lb	Giant Truck Cost to - Consumer US¢/lb	= Giant Mine Netback US¢/lb
1,600 ST	Pennwalt	Texas	23.25	4.74	9.10	18.89
1,600 ST	V.P.G.	Texas	23.25	6.81	8.70	21.36
1,500 ST	Osmose	Tenn.	23.25	2.70	8.90	17.05
800 ST	J.H. Baxter	Utah	23.25	6.30	6.00	23.55
1,000 ST	Koppers	Geog.	23.25	2.70	11.00	14.95
6,000 ST	Weighted Average Mine Netback					= 18.655¢/lb

2. Table II - Return on Investment

		Year 0 1979	Year 1 1980	Year 2 1981	Project Total 1979-1981
Quantity Produced/Sold	ST	-	6,000	6,000	12,000
Mine Netback	¢US/lb	-	18.7	18.7	18.7
	\$US/ST	-	370	370	370
Mine Revenue	\$US	-	2,220,000	2,220,000	4,440,000
Giant Investment	\$US	(900,000)	0	0	(900,000)
Operating Cost	\$US	-	(600,000)	(600,000)	(1,200,000)
Before Tax Cash Flow	\$US	(900,000)	1,620,000	1,620,000	2,340,000
Less: Depreciation	\$US	-	(450,000)	(450,000)	(900,000)
Less: Taxes @ 50%	\$US	-	(585,000)	(585,000)	(1,170,000)
Plus: Depreciation	\$US	-	450,000	450,000	900,000
Project After Tax Cash Flow	\$US	(900,000)	1,035,000	1,035,000	1,170,000
(a) Project After Tax Discounted Cash Flow (i=12%)	\$US	(900,000)	924,110	825,100	849,210 NPV
(b) Project After Tax Internal Rate of Return =			79%		
(c) Payback Period =			11 months		