

FALCONBRIDGE NICKEL MINES LIMITED

INTER-OFFICE MEMORANDUM

DATE: April 4, 1979

TO: Directors - Giant Yellowknife Mines Limited

COPIES TO:

FROM: D.J. Emery

SUBJECT: ARSENIC UPGRADING PLANT

Research by the Falconbridge Engineering, Marketing and Metallurgy departments plus our mine personnel has shown a good potential for selling an upgraded Arsenic product from Giant. The upgrading scheme shows excellent chances of making a high rate of return on the new investment. (see enclosures)

Some of the significant figures for the proposed facility designed to produce a maximum of 6,000 Tons of finished produce per year follow.

Not sent

	Production Target Purified As ₂ O ₃	3150 T/Year	6000 T/Year
Crude Input Analysis		90% As ₂ O ₃ .1 oz Au	80% As ₂ O ₃ .25 oz.
Capital for Plant		825,000	825,000
Capital Reserve for Transportation		100,000	100,000
		925,000	925,000
Operating Costs As ₂ O ₃		326,786	622,000
Operating Costs Gold		12,250	65,625
Sales Value at Giant As ₂ O ₃ (Apr. 1/79)		693,000	1,320,000
Sales Value at Giant Gold (Apr. 1/79)		96,600	517,500
OPERATING PROFIT		\$ 450,614	\$1,149,875

If the upgrading is not done the following storage costs will be incurred.

Capital for New As ₂ O ₃ Storage Stopes - late 1979	\$ 717,000
Annual Operating Costs for Storage System	\$ 100,000

The project should receive approval in principle.

D.J. Emery

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