

D. J. FEB 12 1981

FALCONBRIDGE NICKEL MINES LIMITED

INTER-OFFICE MEMORANDUM

DATE: February 11, 1981

TO: D. Zeraldo

COPIES TO: ✓ D.J. Emery, W.A. Moore

FROM: P.J. Raleigh

SUBJECT: CON POND MATERIAL

The attached letter from Con prompted me to look at the probable value of the reserves in the surface storage ponds there.

If we accept the information provided to us by the Con group the following is the current status of the pond.

Volume (dry	45,000 Tons
As ₂ O ₃ Content	70%
As ₂ O ₃ Contained	32,000 Tons
Gold Content	0.48 oz/Ton
Silver Content	2.00 oz/Ton

Value of Precious Metals:

Gold	21,600 oz x .8 x 575.00	=	\$ 9,936,000.00
Silver	90,000 oz x .8 x 19.00	=	<u>\$ 1,368,000.00</u>
			\$11,304,000.00

No Value for As₂ O₃

Cost of Treatment is assumed to be about \$200.00/Ton of residue.

Net Value:

11,304,000.00 - (45,000 x 200) = \$2,304,000.00

The pond has little or no value, if the value of the contained arsenic is not taken into account. It is a foregone conclusion that Con cannot treat the pond profitably on their own.

Treatment Plant Costs Capital

say $\$6 \times 10^6$

Treatment Costs to produce $\text{As}_2 \text{O}_3$

6¢/#

Treatment Costs to recover gold and silver and handle material from their pond - 4¢/#

Treatment rate - 5,000 T/year

Net Values for Gold, Silver and $\text{As}_2 \text{O}_3$

Gold	(5,000 x .48 x .8 x 575)	\$ 1,104,000.00
Silver	(5,000 x 2 x .8 x 19)	<u>152,000.00</u>
		\$ 1,256,000.00

Arsenic Value:

(5,000 x .7 x .15 x 2,000) \$ 1,050,000.00

TOTAL GROSS 2,306,000.00

Operating Costs (5,000 x 200) 1,000,000.00

NET PROFIT \$ 1,306,000.00

N.P.V. @ 15% I.R.R. before taxes is - \$231,689.00

The proposition does not look attractive after taxes nor considering the risks.

A deal may be worked out to treat the material at Giant using a fuming process which should show the following results.

Capital	2×10^6
Operating Costs	1×10^6
Gross Value	\$2,306,000.00
Net Value	\$1,306,000.00
Years of Operation	9 years

N.P.V. @ 15% I.R.R. before taxes is - \$4,231,689.00 or the difference in the capital expenditures.

It is worth a lot more to Giant than Con particularly since the Giant waste disposal system can handle Arsenic and the one at Con cannot.

The price of purified arsenic is taken at 15¢ assuming a price of 35¢ prevails with a transport cost of 20¢/# to the user. The actual values are probably somewhat more attractive

P. G. Raleigh
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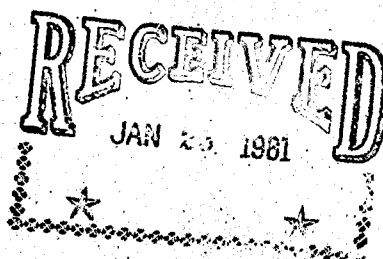
cc DYE, Kent, Larry, Lynn Price

Cominco Ltd. / Box 2000 / Yellowknife, Northwest Territories, Canada X0A 2M1 / Tel. (403) 873-2783
Telex 034-45511



Mr. W.A. Moore
General Manager
Giant Yellowknife Mines Ltd.

January 20, 1981



Dear Bill:

Re: Con Arsenic Residue

As the deadline as stipulated in our water licence draws nearer we are concerned with the lack of progress in formulating a firm plan for the elimination of the Con Arsenic residue. To this end Cominco is looking into the feasibility of constructing a hot water leach plant at Con. No firm commitment has been made to date to go ahead with this project but some pilot work has been done in Trail and an engineering cost estimate for the plant has been prepared.

Because Giant and Con have a mutual interest in the Con Arsenic residue and have co-operated over the past two years in trying to come up with an economically viable solution for treating both Con Arsenic and Giant Arsenic I want to keep you informed of our plans. I would also appreciate hearing of any progress in the construction of a treatment facility at Giant. As you can appreciate the deadline of June 1, 1981, is just around the corner and Con must move quickly to come up with an environmentally acceptable solution to our Arsenic pond problem.

Yours truly,

J.R. Greenhalgh
Manager
Con Operations

JRG/jd

cc: H.M.G.
L.P.S.
File

JAN 2 1981