

Notes of a Meeting
April 6, 1979

Present were: L. Hurst, P. J. Raleigh, P. Zaharuk, D. Zeraldo, T. J. Desanti,
H. Evans and D. J. Emery

The meeting was held to discuss any points that might be outstanding before the Directors' meeting on April 10. We discussed the rate of return and the need to indicate to the Board that their approval would be subject to successful completion of the pilot plant work, suitable product quality and firm commitments on the market. Another consideration was the need to develop underground storage immediately if we didn't go this upgrading route.

Raleigh noted that if we got a June go ahead to start up in December we would be looking at marketing in the first quarter of 1980. Howie Evans questioned whether we were allowing enough time, that is two months for the pilot plant work. Desanti emphasized how necessary it was to have a sample of the product so they could get commitments from the buyers. It was agreed that if we were unable to market the product, then we could end up with a disaster having to go underground storage after spending a lot on the upgrading facility.

It was suggested that the piloting be speeded up and done on a round the clock basis. If necessary help could be supplied from Falconbridge.

With reference to plant size, the reason for going to 6,000 tons per year was to take care of the present baghouse production plus recovery of either the Con or Giant underground material. The profitability is much better using the 6,000 tons per year than the current production of only 3,000. The extra cost involved is somewhere in the order of \$200,000.

When questioned about the ammonia process and where it fits in, Zaharuk replied that it was much too far away to be considered at the present time. Evans agreed and said that as far as he is concerned it is a Lab curiosity. Desanti confirmed that the market outlook suggests a need for the larger plant. Raleigh reiterated the economics of scale were much in favour of the larger plant.

Zaharuk suggested that when we do get the go ahead, we should visit installations using the submerged burner and cooler coils to make sure that we have as much practical know-how as possible. Raleigh noted the need for maintaining excellent records on the pilot plant work.

With reference to ordering equipment, it would appear that the filtration unit will take the longest time, approximately 24 weeks delivery.

Transportation was discussed briefly. It will take three months to line up this aspect of the operation. We need samples of the product to determine

flow characteristics as Trimac is concerned about crystal size. This is another point in favour of the larger plant as bigger tanks will permit slower crystallization and hence larger crystals. It was noted that the pilot plant will help determine what crystal size can be expected as well as purity and colour. Evans suggested we may have to go to a carbon column to get rid of impurities that may cause some colouration. Carbon column would go in after the filter.

Next there was some discussion on the organization of the project. It was suggested that Giant should have a project leader who should have a knowledge of the pilot plant work and be a good sound technical man. He would report to management and insure that equipment was accepted in good order and keep on top of the project. Larry Connel was suggested.

With reference to site preparation, it would be necessary to have the kiln removed by the end of August so the building could be ready by September 1. Howard Bye should be involved. Zaharuk and Raleigh suggested purchase requisitions be made up by the technical head office staff but acted upon by the purchasing agent of the mine. Warehousing would also be done at the mine.

There would also be a need to line up local contractors for whatever site work was required.

There was some question as to whether Falconbridge Engineering or Hatch and Associates would be involved in the project. This has yet to be decided. It would likely be Hatch and Associates working through the Falconbridge Nickel department.

There was then some discussion on environmental aspects. We will need governmental approvals. It was noted that the E.P.A. in the U.S. has approved this sort of installation and transportation of similar product. Evans questioned how much delay we might expect if they went in for hearings. Raleigh noted that during the first week of May he and Price will be up to Giant to get moving on the approval aspect. We should have the approvals by June 1st.

With reference to liability for the transportation of the product, it was noted that the carrier can't assume all liability and that the producer of the product remains responsible.

The Koppers secrecy agreement was briefly discussed. This will be a mutual secrecy agreement.

For operating of the plant there will be a need for fuel storage of some 20,000 gallons. We will be using No. 2 fuel oil. About 280,000 gallons

will be needed on an annual basis for 6,000 tons per year plant. The plant will require about 10 people, three shifts a day, seven days a week.

We discussed possibilities of an announcement to the press. It was decided that it was premature. The Ontario Securities Exchange Commission may have to be notified eventually as should be the shareholders. It was felt that all of this could be done after the project was finally approved and we had a contract to sell material. If questions are raised at present we would have to reply that everything is still under study.

In summing up we agreed that three provisos had to go on to the request for approval from the Directors:

1. The government would give their approval.
2. Pilot plant results showing satisfactory production, quality and commercial viability.
3. Firm commitments to purchase 3,000 tons per year were obtained.

It was noted that the gold recovery would take place in the existing plant.

Note after the meeting.

I phoned George Aaltonen at Giant Yellowknife and explained our concern about the pilot plant work. He replied later in the same day to say that they were working on a round the clock basis and had enough personnel to do the work. They felt they could have the pilot plant results out within a month and that any further operation of the plant after that would depend on the amount of product required for marketing. Marketing was asked to give their requirement.



D. J. Emery