

Notes of a Meeting
With G. A. Aaltonen and K. S. Morton
Re Arsenic Upgrading Plant
April 23, 1979

We met in the Town Office to discuss progress on the pilot plant work and also the secrecy agreement.

With reference to the pilot plant, George said that they are having problems with the filter press. Felt was used with some success but now the press has been abandoned in favour of a thickener which is working like a charm.

The big problem at present is getting proper crystallization of arsenic. The pilot plant is supposed to produce 150 to 200 pounds per day in crystal form. Evidently what is happening now is the formation of arsenic in sheets along the sides of the vessel and on some of the apparatus within the tank, not on the screens as is supposed to happen. The problem is such that help is probably going to be required from somebody in the Falconbridge Group. Morton had been in touch with Price already today.

Morton presented a translation of a Japanese paper on the purification of arsenic using pressure vessels. He feels we should be looking at this. The cost of an autoclave for the pilot plant work would be in the order of \$4,500. They may be able to fabricate one themselves and are looking into this possibility. With the pressure vessels, it is possible to get arsenic dissolved to 250 grams/litre instead of the 70 or so under the present leach system. Temperatures would also have to be in the order of 120°F rather than the 212° of the system now being tested. The process looks very promising. It was patented in 1978 but possibly the patent doesn't apply in Canada.

We discussed the secrecy agreement. Both Aaltonen and Morton noted that they had been talking to Con and Con has offered help in the development of the process. They are concerned that the secrecy agreement suggested will prevent them from working with Con. I indicated that I wasn't aware of this collaboration and therefore would have to get back to our lawyers to see how we might take care of this aspect. Kent further thought that if there is no patent on the Koppers process then why bother with the secrecy agreement. Aaltonen suggested that we contact CanMet re possibilities of the arsenic ammonia leach system already uncovered in literature. I stated that we would want to be careful not to renege on any sort of understanding we had with Koppers by going to CanMet, and therefore would check with our lawyers on this.

We discussed the need for accurate information on available arsenic storage as it would now appear that the pilot plant work would be delayed. George Aaltonen will check into this. Evidently Ziggy feels that if we mine out one of the low grade stopes there may be some storage available in a drift leading to it that would provide up to five years of storage space.

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We discussed the visit by Raleigh, Zaharuk and Matich at the end of the month or early in May. It would appear that their visit will be very timely in view of the problems with the pilot plant and the secrecy agreement.

I indicated I would be calling Zaharuk to advise him of our discussion today. I also noted that Frank Pickard should be involved in the work but possibly this should be handled through Zaharuk's group. We also discussed the possibility of having Ed Foster as a consultant on the project.



D. J. Emery

/vb

April 24/79

Called Zaharuk (+ Raleigh) + notified of above.
They arrive April 30th 79. GAA alerted.

