

MEMORANDUM

TO: Marek Stephanski
CC: S. McAlpine, G. Halverson, M. Irving
FROM: K. Morton
DATE: January 22, 1990
SUBJECT: EDA GRANT, HI TEMP FILTRATION TESTWORK

In response to your query for additional information regarding timetable and work breakdown, please be advised of the following.

The project will commence immediately following notification of project approval by CANMET, and a purchase order will be issued to Pall Canada who will expedite engineering and fabrication of the tubesheet filter-blowback nozzle assembly.

Assuming that approval for the project will be forthcoming immediately, the following work schedule will apply:

Phase I Plant Modifications

Install valves and piping to provide a bleed stream from the existing roaster gas train at Giant, install new tubesheet assembly and hi-temp filter vessel.

Start - Early February

Completion - End February

Phase II Test Program

Carry out roaster program to test effectiveness of filtration technology for separation of antimony from volatile arsenic. Collection of data and investigation of two stage filtration concept.

Start - Mid March

Completion - Mid April

Phase III Reporting

Analysis of results and completion of final report
Completion - End May.

Cost and Payment Schedule

Giant will complete the work as outlined in this proposal for the sum of \$80,000 (Eighty Thousand Dollars) which will include the subcontracted cost of work to be completed by Pall (Canada) Limited, the cost of consulting services of W.R. Hatch, the cost of plant setup and modification, and the cost of performing the testwork.

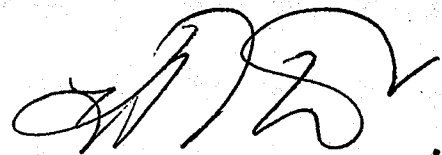
In addition, Giant's administrative, engineering and supervisory costs are estimated at approximately \$20,000. Interpreting test data for use in detailed plant design, supervision and program monitoring, internal accounting and administration, report writing, etc. are all included in Giant's costs.

Program costs will be approximately as per the following schedule:

(a) Upon completion of Phase I	\$40,000
(b) Upon completion of Phase II	\$45,000
(c) Upon completion of Phase III	\$15,000

Please note that for economic reasons, Giant intends to perform the work in-house using Giant personnel. Mr. Ron Hatch, a process consultant from Toronto who has done excellent work on arsenic purification for Giant in the past, will be overseeing the test program, analyzing the results obtained, and providing a written report.

Should additional information be required, please contact the undersigned.



Kent Morton