

KOPPERS

John D. Hite
Vice President and General Manager
Specialty Wood Chemicals Division

November 2, 1978

Mr. D. Emery, President
Giant Yellowknife Mines Ltd.
Yellowknife, North West Territory
Canada

Dear Mr. Emery:

Koppers Company, Inc. and Giant Yellowknife Mines Ltd. are currently evaluating the practicality of collecting and transporting crude arsenic trioxide from Giant Yellowknife Mines' smelter facility in Yellowknife, North West Territory, to Koppers Conley, Georgia, arsenic acid plant and using the crude arsenic trioxide in Koppers arsenic acid plant. Both firms have spent considerable resources on this evaluation and will be required to spend additional resources before the evaluation is completed. This letter serves to document the basis for this continuing evaluation and to outline the basic terms of a sales contract between Giant Yellowknife Mines and Koppers for crude arsenic acid should the results of the evaluations prove positive.

Koppers will, at its own cost, determine what further processing of the crude arsenic trioxide is necessary to make it suitable for use in Koppers' arsenic acid plant. Koppers shall also determine the minimum specifications for crude arsenic trioxide that are acceptable for use in its process.

Koppers, with Giant's cooperation, will determine the best mode of initially transporting the crude arsenic trioxide from Yellowknife, NWT, to Conley, Georgia. In addition, Koppers, with Giant's cooperation, will optimize this initial mode and develop alternative modes that will reduce the transportation charges.

Giant, with Koppers' cooperation, will determine the best mode of handling the crude arsenic trioxide in Yellowknife. Giant will also investigate the possibility of refining the crude arsenic trioxide at Yellowknife.

In the event the above-mentioned evaluation is favorable, Koppers and Giant will enter into a sales contract based on the following terms:

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1. During the first year of the agreement Koppers agrees to purchase at least 1,000 tons of As_2O_3 (100% basis). During the second and each subsequent year Koppers agrees to purchase at least 1,500 tons. Giant agrees to supply up to 3,000 tons of the As_2O_3 during the first year and 3,500 during the second and each subsequent year. Giant also agrees to use reasonable efforts to supply Koppers with quantities exceeding the above stated amounts. Koppers agrees to use reasonable efforts to purchase Giant's entire trioxide output.
2. The agreement shall be for an initial term of five years and shall be automatically revolvable for one-year periods unless either party gives a one-year written notice of termination prior to the end of the initial five years or any subsequent two-year period.
3. The initial price for the crude arsenic trioxide delivered to storage at Koppers Conley, Georgia, plant will be 25.33 U.S. cents per pound on a 100% As_2O_3 basis. The price shall be adjusted semi-annually in accordance with the following procedure:
 - a) A base price will be determined. The base price shall be the lowest price in store at Conley, Georgia, at which Koppers is able to procure equivalent arsenic trioxide from a bona fide producer.
 - b) From the base price all direct costs incurred by both Giant and Koppers in recovering, loading, transporting, unloading, and purifying arsenic trioxide or its residual sludge expressed in a per pound basis will be deducted. Direct costs will include operating expenses and an assumed 50% return on average yearly net investment (a 2 point average in January and December). The initial annual poundage basis is assumed to be 2,000,000 pounds per year.
 - c) The difference between the base price and the sum of the costs in Item b) is defined as net savings and will be split equally between Koppers and Giant. Since Koppers is a recipient of all value represented by the material as well as the total net savings, the sales price paid by Koppers to Giant (on a 100% As_2O_3 basis in-store at Conley, GA) will be the sum of Giant's direct cost plus Giant's share of the net savings. In the event that Koppers purchases arsenic trioxide which is not ultimately consumed at Conley, the sales price will be the same as that computed above.

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- d) For example, if the base price is 25.33 U.S. cents per pound and costs are as follows:

	<u>U.S. ¢/lb. (100% As₂O₃)</u>
Base price	25.33
Annual Volume	2,000,000 lb. (100% As ₂ O ₃)
<u>Giant</u>	
(1) 50% return on \$100,000 loading station =	2.25
(2) Depreciation on \$100,000 loading station (5 yr.) =	1.00
(3) Operating Cost =	<u>0.75</u>
Total Giant Cost	4.00
<u>Koppers</u>	
(1) Freight Cost =	7.60
(2) Return on \$300,000 transportation system and \$50,000 unloading system =	7.88
(3) Depreciation on investment =	3.50
(4) Operating Cost =	<u>0.75</u>
Total Koppers Cost	19.73
Total Cost and Profit	23.73
Net Saving	1.60
Giant's Share of Net Saving	0.80
Koppers' Share of Net Saving	0.80
SALES PRICE	4.80

4. In the event the net saving as calculated above turns out to be negative, Giant shall lower its price until the net saving is zero, however, Giant shall not be required to lower its price below the level of direct cost, excluding profit or investment.
5. The agreement will contain a provision excusing either party from performance of the agreement in the case of force majeure which shall include, but without limitation, governmental restrictions, war, strikes affecting production or transportation, riots, explosions, fires, floods, and the like.

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Based on the above points of understanding, I hope we can proceed immediately to undertake the necessary investigations to demonstrate the practicality of using Giant trioxide in the Conley arsenic acid plant. We are confident on the basis of information gathered thus far that the practicality of this concept will be demonstrated. I sincerely believe that this represents an attractive opportunity for both of us and I believe the concept of splitting the net savings down the middle is as fair a method of apportioning the benefits of this program as possible.

If you are in agreement with the above, please sign one copy of this letter and return it to us for our files.

Very truly yours,

John D. Hite

JDH/nh

cc: Mr. T. A. Beatty
Mr. P. J. Raleigh

ACCEPTED BY:

name

title

name

title

FOR: KOPPERS COMPANY, INC.

FOR: GIANT YELLOWKNIFE MINES LTD.