

MEMORANDUM

To L. Price; c.c. J.M. Mortimer
From H.E. Pawson
Subject Arsenic Suppression

Date May 28, 1975

Ref. _____

Attached are the latest results of the arsenic investigation by Tucker and Olesen. This set was prompted by previous work which concluded that precipitates of insoluble arsenic produced by coprecipitation with lime or iron salts/lime were returning to a soluble state. This phenomena resulted when the so called precipitated arsenic made contact with other pulps.

Based on this, it was decided to treat a filtered or clarified solution for its soluble arsenic content. Normal settling without the use of flocculants was felt to be the acid test. This was set up on a lab scale test.

The results indicated that carbon plant waste presently treated in the #5 agitator could be settled to allow removal of 65 to 70% of the liquid for treatment with 30# CaO/ton. This would create an insoluble arsenic precipitate which would be sent to storage separate from any other pulp or tail.

Although untried as yet, it is felt that flocculants could increase the percentage of liquid removed from the primary settling stage. above 70%.

Furthermore, it appears that isolation treatment allows the reaction to carry on.

<u>#CaO</u>	<u>pH</u>	<u>p.p.m. As.</u>
30	11.6	7.0
3 days later	11.6	5.5
8 days later	11.7	5.4

H.E. Pawson
Mill Superintendent