

To W. A. Moore

Date April 7, 1976

From H. E. Pawson

Ref.

Subject REASON FOR ABOVE AVERAGE ARSENIC IN THE TAILINGS, JAN. & FEB., 1976

In January and February of this year, Cottrell crews began preparation for placing units 3 and 4 of the Cottrells on line since 1 and 2 are near end of this service life. To do this, all build-ups of dust, etc. must be first removed from the header or delivery flue. See diagram.

You will note the dead end in this header and you can therefore appreciate the large build-ups that occur here. This large tonnage is air lanced down for eventual treatment in the carbon plant for gold and subsequent lime treatment to suppress arsenic. Without bogging you down with detail, suffice it to say that since the dust build-up in the dead end cools down, the gaseous arsenic making contact with the cool dust passes through its sublimation point and becomes a solid binding like a cement. It literally and figuratively takes months to get this stuff out.

As this material hits the carbon plant, specifically the thickener (#13) it dissolves because of its high solubility. The overflow from this thickener goes to #8 thick. for lime treatment but at the elevated arsenic content it becomes near impossible to feed sufficient lime to suppress the arsenic. Extra lime to the tune of two tons^{per day} was added during this period during J. McKay frantic.

You can assure M. Brown there will be no significant increase of arsenic in tailings decant however.

