

COMMENTS ON JACK NICKEL'S SUBMISSION TO THE MINING SUB-COMMITTEE
MEETING OF JULY 31, 1981 - RE: ABANDONMENT PLAN

1. The minimum water depth is 3m but the average is 5m. The calculations should be performed using water cover of 5m over the tailings. Table VII - 4 should read 5m not 7 m.

The sensitivity of depth of water should be included in the Report.

2. I previously told Klohn Leonoff that all surface water samples analysis included in the report should have volumes and the date that the sample was taken.

Was the in situ sampling done at the same time as the samples for lab analysis were taken? If so, why the difference in pH and temperature? and if not? why not?

I think the flow volumes of WD-1 were low and would explain the lack of inclusion in the water model. Was the flow of WD-1 the result of spring run-off? or is it the main flow from pit?

3. Appendix VIII: Klohn Leonoff have stated that they will remove the Beak Report. I don't think that is possible now. The points raised by Beak and the erroneous statements made by Beak must be explained or restated in the final Report.

For example, there is a considerable over-wintering habitat that will exist upstream of the tailings area which is not recognized by Beak and should be explained.

4. I realize that rainbow trout data was used in determining acceptable zinc concentrations. The request for using receiving waters and grayling is well taken but I believe it is the regulatory agencies responsibility to provide required basic data to be used.

If we were to use U.S. E.P.A.'s publication factor of 0.005, the standard would be much lower than Rose Creek upstream of the tailing storage area.

5. area of tailings sands are relatively small and can be covered with tailings slimes by re-slurrying slimes at a relatively high density, say 60% solids by weight and depositing these slimes over the more porous areas hydraulically. The slimes could also be classified, thickened and deposited on the sand areas during the last few years of operation. Costs in either case would be relatively low.

6. The word significant should have read insignificant.

7. I agree the hydrological model for chemical analysis is incomplete. Dr. Sharer has agreed to work out H.M. concentration for all items of each mode.

COMMENTS ON DR. RUSSELL'S NOTES OF JULY 29, 1981 ON
FARO ABANDONMENT STUDY

Item C: The possibility of progressive glaciation is very remote because the winter flows would be taking place under 8 meters of rock cover. This problem could be checked by placing thermistors in special locations in the mine waste dumps to determine temperature gradients relative to the surface. The question of constructing a small experimental flow through structure is not quite as simple.

I am not aware of any way that a small experimental structure will be sufficiently large to test for progressive glaciation and sufficiently small that sufficient water would be available to determine the flow through capacity of the material can be constructed.

The recommendation that it should be done as soon as possible to allow adequate time to modify the design seems to suggest that the design will be starting soon. This is not the case.

(d). The seepage observed in the new facilities will be monitored and steps taken to minimize this seepage. The very impermeable nature of the tailing slimes will assist in sealing off seepage. The observed seepage from the unlined area between the Intermediate Dam and the Cross Valley Dam will define the magnitude of this problem.

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