

JG
→ Island Copper

884826

CLOSURE PLAN MEETING WITH
VIMDRC
Detailed Agenda

July 3, 1991

0830 hours VIMDR Committee arrives at mine site
- to Main Office Conference room for a brief introduction
to our field trip and to pick up hard hats.

0845 hours Bus departs Main office to:
i) Pit Lookout
ii) along South Wall to the head of the 5' culvert, WME.
iii) back along South wall to WMP and
iv) to western end of beach dump, resloped area.
v) return to Main office

1040 hours All participants depart mine site for the Port Hardy Inn.

1100 hours Coal Harbour room, Port Hardy Inn

I. Introduction

- i) S. Fuenzalida - Introduction to ICM
- Current and projected mining

- ii) J. Fleming - Status of exploration in
Expo and Red Dog

- iii) G. Poling, I. Horne
- Summary of 20 yrs of Envir. Monitoring
- Current and future environ. studies
- achievements
- commitment to closure

Objective - To develop an environmentally and economically
sound closure plan.

- refer to K. Ferguson's timetable for developing
detailed Closure Plan
- also see item 7 below

1200 hours / Working Lunch, continue with discussions.

Theme: Toward a Detailed Closure Plan.

2. Plant Site

- i) I. Horne - land use issues
 - buildings left for future industrial development
 - government recommend other use (garbage disposal) *Van.*
 - aboriginal land claims
 - Permit M-9 remove buildings return to wildlife habitat.

3. Land Dumps

- i) ARD prediction - I. Horne, C. Pelletier, G. Poling

IH - history of drainage water quality
 IH - current water quality and commitment to continue monitoring
 CP - new hydrological assessment planned for 91/92 wet season
 GP - recent work by UBC on ICM dumps
 - NNP of tills, kinetic tests, mineralogy, ABA, drilling, long term prediction.

- ii) Treatment and Control, I. Horne, C. Pelletier, T. Parsons

IH - priority of options *acid waters into bottom of flooded pit*
 TP+CP *2* injection into anoxic water of the pit
 IH *2* chemical treatment - sludge to bottom of pit
 IH - most other options uncertain and or uneconomic
 (covers, wetlands) *cf. Bell Copper* *v.p. much larger problem (esp. winter rainfalls).*

- iii) Surface Reclamation - Ian Horne

- as outlined in Closure Plan
- will contour to drain surface water
- quality of top dressing, refertilization, soil nutrients
- rehandle NW dump

*Concern over high levels of Zn in fresh-water run-off.
 TGS - source - eq. skarn vs man-made influence?*

1430 hours - Coffee Break

4. Beach Dump - Ian Horne

- strategy as outlined in Closure Plan 3.3.2
- ask for comments
- reclamation of western end of Beach Dump
- Marginal Stockpiles - began mining in April 1990 - current mine plan to mill all stockpiles by end of Fiscal 1997
 - current stock 21 m tons / by EOY '93, 9 m tons left (i.e. end of May '93)
- will maintain current monitoring program
 - beach holes, interstitial water
 - off face of dump, 3 stations
 - natural reclamation of intertidal organisms
- 30 m tons waste above mean sea level, will consider assessing ARD potential and impacts after more data is obtained.

5. Marine Monitoring - Ian Horne, Jim Murray

- IH - outlined in Closure Plan 3.3.4 and Table 3.4
- IH - pre-closure as in permit
- IH - post closure to target significant aspects
- JM - projected status of tailings bed after discharge ceases

Ex. No sign of Hg in monitoring over last 20 yrs. (in marine field)

- upwelling of material at Hankin Pt.
- locus of sedimentation now (& in future) is in Holberg Inlet (west of Hankin Pt.) (i.e. 'funnels' westerly out of ~~Rupert Harbour~~ Holberg Inlet).
- strong currents, fine sands \implies re-equilibrium to re-established in 2-3 yrs.
- material deflected by 'plunging' currents near Hankin Pt. away from Quatsino Sound.

vs "Kinopenic meromictic" vs "Morph, c" " " " "

[Handwritten mark]

6. Open Pit Reclamation - Ian Horne, Tim Parsons, C. Pelletier

- IH - water body open or closed, pros and cons
- TP - Meromictic Lake option - very stable (stagnant/non-circulating) lake (cf. normal turn-over)
- CP - injection of ARD - ex. Lake Saginaw (Sackett area) - recent paper (Cherry)
- IH - pit wall runoff see 3.3.3.2
 - needs further study
 - prefer to inject may require treatment of open pit discharge with disposal of sludge at pit bottom

Fed. Fisheries will prefer to "close-off" pit as a lake.
 = "Purple" lake (bacteria)
 - no sig. leaching out into Rupert Inlet

7. Develop Timetable for Revised Closure Plan by Dec. 31/74

8. Next Meeting - Van. mid-Sept.

9. Permit Amendment

- Ron Bollans and staff to present update on PE-379 amendment
- WM Pond management to ensure water release is in compliance

1700 hours - Adjourn

Permanent closure vs Temporary closure? (eg. custom milling)