007496

Re: Kilborn proposal for Faro : by Godfrey McDonald
— Tailing Deposition, Water Recycle Nov. 22, 1990

Questions –

1) Will the tailing on the downstream side of the Intermediate dam increase its stability so the 1:4 regrade slope in the abandonment plan will not be required?

2) Will a 1:4 regrade slope for the existing Cross-Valley dam be required or can it's height be reduced to provide only <u>one</u> metre of water coverage over the tailings?

→ Possible capital cost savings

a) <u>No</u> 1:4 reslope of the Intermediate dam.
b) Reduced height of the existing Cross Valley dam will greatly reduce the material quantity, to reslope this dam for abandonment.
c) Design the next Cross Valley dam with non-acid generating mine rock and a clay or plastic water impervious layer. The dam would be of a lower profile than the existing dam and not need resloping for abandonment. It would be the polishing pond for the abandonment water treatment plant if one were required.

[Margin note beside c): the xvalley dam is built from till etc – Till core sand & gravel and careful sand filters]

Would not regrade both xvalley and ID only one or the other.
My understanding of current thinking is remove xvalley Dam using material to regrade ID then ID is only Dam – This requires cleaning up any slimes behind X Valley dam

A review of the Kilborn "Proposal for FARO Mine" on Tailing Disposal and Volume Determinations, Recycling of Process Water and Mine Closure Implications, gives a good summary of the initiated work and the assignments/commitments as understood by each of three companies. The problem of co-ordinating a programme that has different commitments and starting dates has caused confusion and an overlap of assignments. The Steering Committee of Curragh Resources Inc will have to review the programme so study areas, engineering/consulting duties and responsibilities can be reassigned, with all the costing (capital and operating) developed by one company so option comparisons are on the same basis.

The overlap of duties or assignments that I have found are as follows:

A) Cost Estimates

① SRK – Currently developing a decommissioning plan for the existing tailing pond.
- determine quantities and costs for selected options

Strathy for closure plan

KILBORN – On each option Kilborn will provide a cost estimate

for operational facilities
a) Capital – dams, pumping/thickening, spillways, water treatment.
b) Operating and manpower

② SRK – To determine what mitigative measures are required upon decommissioning:
a) design the measure and cost
b) include long term structures, conceptual designs, cost for construction and maintenance (raising the existing dams and upgrade the Rose Creek Diversion)

There is no question that Golder should be the source of information on costing and play a part in detailed design the conceptual design however is heavily involved with chemical mitigation which only SRK has experience

three companies

GOLDER - Have data on construction quantities, costs for raising the Intermediate Dam.
- Spillways are expensive (Golder's comment)

B) Zone II PIT EFFLUENT

① SRK - Design detail on temporary dewatering of the Zone II pit
- Long-term pollution abatment options regarding the Zone II pit (ongoing dewatering).

> (KILBORN - Divert runoff away from Zone II area) done
> (- Dewater Zone II and maintain a low level to prevent seepage to Rose Creek) being done now

Don't need Kilborn now

C) Tailing Deposition

① GOLDER - Volume determination (storage above the Intermediate dam)

KILBORN - Measure submerged tailing adjacent the Intermediate dam.

These were several ideas mentioned that I would like more clarification:

① KILBORN - Pit tailing deposition - moving the spigot point, sealing the pit walls below the water/tailing surface? Question How?

② GOLDER - An operating option - use the existing polishing pond for tailing, construct a new cross-valley dam downstream of the existing dam (lower cross-section).