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TO: Yukon Mineral Development Strategy Committee

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Re: Recommendation for Mineral Development

No province or territory has a fully comprehensive set of legislation in place that covers the costs of failed mining operations. If such a policy were in place, the disastrous examples of Currach Resources Faro, Wolverine and Whitehorse Copper would not be environmental problems costing us hundreds of millions dollars.

The following proposal is designed to provide an initial discussion and series of suggestions as to how environmental and shutdown costing should be changed. This would provide all citizens of the Yukon freedom from having to pay clean-up costs, and at the same time, illustrate to all the First Nations groups that mining can be accomplished responsibly.

To give you an idea of my qualifications, here is a brief outline of my career. I graduated with a diploma in mining technology followed by a metallurgical engineering degree, then certification as a Professional Engineer. During my 46 years of experience I worked in the concentrator, engineering and design, environmental, exploration, permitting, feasibility studies and senior management.

Current legislation and permitting requires a series of bonds to cover environmental concerns and eventual shutdown reclamation and rehabilitation costs. At this time, these are very nominal fees. They are nowhere near adequate to cover all costs if a mining company walks away from the operation at any time, due to one of many factors.

This is the main point of my submission.

The following are the key points:

- Financing by a prospective mine must be a combination of up-front capital as part of the feasibility cost and part continuing operating cost on a monthly basis.
- The up-front capital would be factored into the feasibility study and cover full demolition and property rehabilitation in the event the company declared bankruptcy and walked away before operation actually started. One item that must be investigated is who has the salvage rights to all the assets? Can this be used by the government as part of the cost, or is it seized by the banks?

- The engineering firm preparing the feasibility study is usually under significant pressure to reduce the overall cost, reduce initial required capital and make the financing look good to investors. These costs must be reviewed very carefully by a government department fully familiar with rehabilitation costs.
- Once a mine starts up, monthly operating costs become the focal point. A long term plan must be developed and costed out such that the operation pays a fee every month towards the future shutdown, rehabilitation and water treatment. This will require a knowledgeable group to establish the plan and costs. It cannot be left up to the mine personnel as their objective is to reduce costs for the present, not necessarily in the future.
- The government must establish a well experienced group that understands all points of engineering, environmental concerns and rehabilitation. It can either be a direct government group or contract out some of the work to a consulting firm. Regardless, there must be government oversight and certainly no conflict of interest between the consulting firm and the mining industry.
- If the actual costs of such future reclamation and rehabilitation cannot be supported in the feasibility study or operating cost study and render the operation uneconomical, then it does not start construction or go into operation.

Although a lot of the above is already in place, it is totally inadequate to cover all costs when a mine suddenly walks away from its operation. The whole concept of “environmental or rehabilitation” costing needs a fresh and in-depth study. Unfortunately, our civil service personnel do not have the required experience.

With some thought and planning, the Yukon can be a leader in permitting and managing the land for multi-purpose while at the same time encouraging a successful mining industry.

I am available at any time to further this discussion.

Regards,

A handwritten signature in blue ink, appearing to read "M. A. Redfern".