



Province of  
British Columbia

Ministry of  
Energy, Mines and  
Petroleum Resources  
GEOLOGICAL SURVEY BRANCH

Suite 301, 865 Hornby Street  
Vancouver  
British Columbia  
V6Z 2G3  
Telephone: (604) 660-2708  
Fax: (604) 775-0313

886407

June 16, 1992

File: Mine Closures & Premier

Alf Randall, Chief Geologist  
PREMIER Gold Mine, Westmin Resources Ltd.  
P.O. Box 476  
Stewart, B.C.  
V0T 1W0

Dear Alf:

Subject: **PRESERVATION OF GEOLOGICAL MATERIAL FROM CLOSING MINES**

Just a short note to thank you and Denis for taking the time to discuss the above noted topic during my visit to the Premier mine site on June 15th. As I mentioned, there is currently no specific legislation which addresses the topic of treatment of **geological** material during decommissioning of a mine. We all recognize the value (current or future) of specific **geological** materials such as maps (all kinds/all scales), reports (internal, thesis, etc.) and rocks (core/hand specimens). We (the Geological Survey Branch) would like to work in conjunction with mine staff to preserve some of the **non-confidential** geological material which the company no longer requires/wants to keep in their 'hands' - material which could be of value to future explorers, educators, historians, etc. As the Premier mine operation nears 'final' closure, hopefully several years from now, this co-operative 'joint venture' will take shape; in the meantime, please don't hesitate to contact either Paul Wojdak, District Geologist (Smithers) or myself regarding the topic.

Yours truly,

Tom Schroeter, P.Eng.  
Sr. Regional Geologist

cc Denis Gregoire, Mine Manager  
Harlan Meade, VP Exploration  
Paul Wojdak, District Geologist

TS:JB



April 30, 1991

Mr. Roger McGinnis  
Job Protection Commission  
369 - 1177 West Hastings Street  
Vancouver, British Columbia  
V6E 2K3

VIA FAX: (604) 775-0228

Dear Mr. McGinnis:

**Re: Westmin's Premier Operation**

Further to our telephone conversation with respect to Westmin's Premier operation, I have been in contact with the company and our District staff to obtain additional information. I understand you would like our assessment of the operation to determine the opportunity for assistance, pursuant to Westmin's request. It is also my understanding that Westmin approached your office in an attempt to determine if the Job Protection Commissioner's program could provide them with assistance to ensure the ongoing maintenance of the operation.

For the past year or so Westmin has experienced operating difficulties, primarily as a result of lower than expected grades and less than expected economic reserves, partially caused by low gold prices and high operating costs. The mill capacity is nominally 2200 tonnes per day (t.p.d.) yet it is currently running at only 1500 t.p.d. Employment was at about 165 people but was reduced to 100 in March 1991.

The company has had to downgrade some of the mineralization in its ore body from economic reserves to uneconomic mineralization. The following summarizes information on the reserve situation, other opportunities in the region and some of the issues affecting Westmin's operation.

**Geological Information**

Our Ministry information indicated that the open pit reserves totalled about 3.2 million tonnes in 1990; grading 2.45 g/t Au and 69.37 g/t Ag. The company has explained that this mineralization lies in two phases or zones, one of which is higher cost and therefore may not properly be termed reserves. They have indicated to me that in the economic reserve category, given their current cost structure, they have only 985,000 tonnes of reserves grading about 2.5 g/t Au and 50-60 g/t Ag. At the current milling rate of 1500 t.p.d. these reserves would sustain the operation for about two years.

The underground mineralization has not been drilled to the same extent but the company estimates reserves in the order of 160,000 tonnes. At the mill rate this would add another three months assuming costs were in the same order as presently experienced in the open pit.

LOG NO:	0501	T 5
ACTION:	CWS - cc DVL TGS.	
FILE NO:		

LOG NO:	MAY 07 1991	VAN	4
ACTION:			
FILE NO:	PREMIER		

As you are aware, the company has also been discussing the milling of Tenajon's SB reserves which are in the order of 100,000 tonnes. It is my understanding that an agreement between the two companies is being negotiated as to the contractual terms for milling this ore.

Other properties in the area contain various reserves of gold and silver that could be milled at the Westmin operation. Some of the information gathered by our ministry to-date is summarized below.

Property	Reserve	Date of Estimate
Westmin, Big Missouri	647,900 tonnes 2.78 g/t Au 23.05 g/t Ag	1988
Royal Scot Resources, Scottie Gold	119,750 tonnes 19.2 g/t Au	pre-1990
Westmin/Tenajon, Silver Butte	279,400 tonnes 17.14 g/t Au 36.68 g/t Ag	1990
Lac Minerals (Bond Gold) Red Mountain	846,412 tonnes 9.51 g/t (est.)	1991

We do not have detailed information on all of these deposits but it is my understanding they would all require some further planning, environmental approvals and feasibility analysis. The largest of the above deposits, Red Mountain, would require the development of road access.

### Milling Operation

The mill was constructed to a capacity of 2200 t.p.d. Currently it is operating at about 1500 t.p.d. We understand that it is functioning well for the ore from the Premier mine. The company expects it is able to handle other ore amenable to cyanidation. It does not contain a flotation circuit and hence will not recover the zinc values from Tenajon's SB property. The company advises that to add a flotation circuit will be based on future ores and the economics of the situation.

### Custom Milling

The company has advised that in addition to the properties noted above they have identified some 15 other properties in both B.C. and Alaska that could have some potential to supply ore to the mill on a contractual basis for Westmin to process. Some of these may have environmental approvals in place.

The Ministry of Energy, Mines and Petroleum Resources is not in a position to assess the viability of a custom milling operation. Each case will have to be assessed on its own merits, taking into account transportation distances, handling facility

requirements, metallurgy, ore grade and contract terms. We do note, however, that the company has an environmentally permitted tailings pond in this area with some significant capacity, power from the B.C. Hydro grid and in-place community infrastructure.

#### Other Issues

Westmin reported that they perceive their cost structure to be adversely affected by high hydro costs, reported at \$120,000 per month, and property taxes approaching \$1,000,000 per year. They further noted that their economic reserve picture would be enhanced if their fixed costs could be reduced. In particular, a greater proportion of the Phase B reserves would become economic, thus extending the life of the mine.

Obviously, the reserve picture would also be improved if metal prices increased, however, we do not see particular salvation in this regard. Most prognostications do not see gold prices breaking out above the \$400 level for some time, rather they are likely to continue fluctuating in the current range.

Despite the apparent short mine life, based on the existing economic reserves in the Premier open pit, mineralization in the area is high and further reserves may be proven through future exploration efforts. Some of these will likely be Westmin's own reserves and others could be amenable to custom milling. Furthermore, the community of Stewart is largely reliant upon the mine and its employees for its tax base and ongoing support of the existing infrastructure. For these reasons we feel that a more detailed review of the situation by your office would be advisable.

I trust this information will provide some assistance in your assessment. If you require more information please contact me.

Yours sincerely,



Brian J.N. Parrott  
Director, Mineral Policy Branch

cc: Bruce McRae  
Assistant Deputy Minister



Province of  
British Columbia

Ministry of  
Energy, Mines and  
Petroleum Resources  
GEOLOGICAL SURVEY BRANCH

Suite 301, 865 Hornby Street  
Vancouver  
British Columbia  
V6Z 2G3  
Telephone: (604) 660-2708  
Fax: (604) 660-2653

February 19, 1991

File: Premier

Harlan D. Meade  
Vice President, Exploration  
Westmin Resources Limited  
Suite 904, 1055 Dunsmuir Street  
P.O. Box 49066, The Bentall Centre  
Vancouver, B.C.  
V7X 1C4

Dear Harlan:

Re: Premier Gold Operations

With regard to your letter addressed to Vic Preto regarding the Premier Gold Operations I am pleased that Westmin "remains encouraged about the long term exploration potential of the camp, etc.". If there's anything that I can help with in the area of coastal B.C. and Alaska, please don't hesitate to contact me or our Victoria offices.

Good luck.

Sincerely,

Tom G. Schroeter  
A/Manager  
District Geology & Coal Res.

cc V. Preto

TS:JB