



Energy, Mines and Resources
Box 2703, Whitehorse, Yukon Y1A 2C6

September 16th, 2010

Robert McIntyre
VP, Corporate Affairs & Communication
Alexco Keno Hill Mining Corp.
Suite 1150 – 200 Granville Street
Vancouver, BC
V6C 1S4

Dear Rob:

Re: Approval of Dry Stack Tailings Facility Construction and Operation Plan

Pursuant to section 5.1 of Quartz Mining License QML-0009 (the "License") for the Bellekeno Mine Project, a *"Dry Stack Tailings Facility Development and Operations Plan"* (the "Plan") has been submitted to the Chief for review and approval. This Plan, dated May 2010, was received electronically on May 13, 2010. In considering the Plan, the following documents were also reviewed:

1. July 26th, 2010 letter from EBA Engineering Consultants Ltd. to Alexco Resources entitled *"Response to Environment Canada Questions, Dry Stack Tailings Facility, Bellekeno Mine Mill Site – Yukon"*.
2. August 20th, 2010 letter from Alexco Keno Hill Mining Corp to Environment Canada entitled *"Bellekeno Mine, Dry Stack Tailings Facility & Compliance with Metal Mine Effluent Regulations"*.
3. August 27th, 2010 letter from Environment Canada to Alexco Keno Hill Mining Corp entitled *"Bellekeno Mine, Dry Stack Tailings Facility & Compliance with the Metal Mining Effluent Regulations (MMER)"*.

I wish to note that the information requirements e, f & g, as described in the November 18th, 2009 letter to Mr. Clynt Nauman from the Chief, pertaining to dust and the tailings operations, maintenance and surveillance manual have not been addressed in this Plan. Two additional plans providing the outstanding information have been submitted and are currently under review. As this review is still ongoing, this approval reiterates these requirements as conditions to be met prior to placing tailings on to the dry stack tailings facility (the "DSTF").

After review and consideration I, in my capacity of Chief, have determined that the above Plan is approved subject to the following conditions:

1. An assessment detailing the potential dispersal of contaminant dust from the DSTF to Keno, based on wind dispersion models and local meteorological conditions, must be approved by the Chief prior to placement of any tailings onto the DSTF;
2. An operations, maintenance and surveillance manual for the tailings facility must be approved by the Chief prior to the deposit of any tailings onto the DSTF;
3. At least 10 days prior to the commencement of construction, the Licensee shall submit to the Chief final detailed design construction drawings for those structures for which preliminary design drawings were submitted as part of the Plan;
4. The Licensee shall monitor geochemical characteristics of the tailings during operation, and develop final design of the closure cover to mitigate any potential geochemical concerns that may be indicated;
5. As-built drawings of the liner system shall be submitted to the Chief 60 days after each stage of construction;
6. As part of the annual physical inspection required pursuant to section 14.0 of the License, a geotechnical investigation must be undertaken including a final report attesting to the DSTF meeting design intent along with recommendations for any necessary remedial measures;
7. Methods to reduce dust generated by wind or traffic on the DSTF must be implemented;
8. Snow must be regularly removed from the facility during winter operations;
9. Slopes in their final configuration shall be reclaimed progressively to prevent dusting and erosion of exposed tailings slopes; and
10. The following components must be included in the 2010 annual report required under section 14.5 of the License:
 - a. As-built drawings of the excavation and placement of tailings;
 - b. Additional information regarding the extent, thickness and distribution of the peat/organic layer and silt layer within the DSTF footprint area;
 - c. Clarification and assurance that diversion ditches and berms will isolate waters from outside the footprint of the mill site and DSTF area from those waters likely to come into contact with the mill site and DSTF;

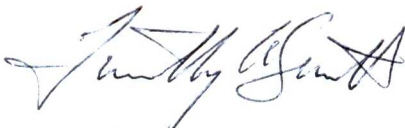
- d. An analysis of the water retention volumes of the DSTF; and
- e. A detailed analysis of potential creep in soils below the DSTF.

I wish to remind you that the License, and specifically section 15 of the License governing final development and mine operations, including the DSTF, prescribes conditions to which the Licensee must adhere. If there is a conflict between the approved Dry Stack Tailings Facility Development and Operations Plan and these prescribed conditions, these conditions will prevail to the extent of such conflict.

For greater certainty, in reviewing and approving the submitted Plan, I have relied upon the seal of the engineer who prepared the report and neither I nor the Yukon Government makes any representations or warranties as to the sufficiency or adequacy of the plans or designs described in the Dry Stack Tailings Facility Development and Operations Plan. Further, you are reminded that the approval of the Chief pertains only to the Chief's responsibilities under the *Quartz Mining Act* and that for greater certainty, nothing in this approval limits the applicable federal or territorial laws, including the *Operational Health and Safety Act* and related regulations.

Please do not hesitate to contact me at (867) 456-3822 if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tim Smith', with a stylized flourish at the end.

Tim Smith
Acting Director, Mineral Resources

cc: Greg Komaromi, Assistant Deputy Minister of Oil, Gas and Mineral Resources
Kevin McDonnell, Director, Water Resources
William Leary, Natural Resources Officer, Mayo