

December 8, 2016

Tim Cazier Colorado Division of Reclamation, Mining and Safety 1313 Sherman Street, Room 215 Denver, Colorado 80203

RE: Dawson Gold Project P-2013-002 Future ground water and surface water baseline study

Dear Mr. Cazier,

Zephyr Gold USA Ltd.'s (Zephyr) continued exploration during 2016 in Dawson Mountain and Windy Gulch west of Cañon City, CO identified unanticipated resources contributing to changes to the developing mine logistics and engineering.

Preliminary ground water and surface water baseline study was completed in December of 2015. Due to potential mine plan changes, Chris Sanchez of Bishop-Brogden Associates re-evaluated the executed monitoring plan. His recommendation for an additional groundwater monitoring well and surface water locations is enclosed.

Zephyr concurs with Mr. Sanchez's recommendation. Should the Division find this program modification acceptable, Zephyr will commence the additional monitoring as described.

Please feel free to call me directly at 719-275-8951 or email at <u>eai@bresnan.net</u> should you have any questions.

Respectfully submitted,

Angela M. Bellantoni Ph. D.

Cc: Loren Komperdo Will Felderhof Dave Felderhof Stephanie Carter, BLM

Environmental Alternatives Inc.

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Christopher J. Sanchez Jeffrey A. Clark Daniel O. Niemela Jonathan D. George Michael A. Sayler Charles E. Stanzione

BISHOP-BROGDEN ASSOCIATES, INC.

November 21, 2016

Ms. Angela Bellantoni Environmental Alternatives 1107 Main Street Canon City, CO 81212

RE: Zephyr Gold USA LTD - Recommendations for Future Ground and Surface Monitoring Point Locations Resulting from Mine Plan Updates at the Dawson Property

Dear Angela:

This letter presents recommendations for future ground and surface water monitoring points for the Dawson Mine project resulting from updates in the mine plan and changes to the locations of various mine facilities. In order to prepare these recommendations, we met with you and reviewed the conceptual updates to the mining plan, and we completed a site visit to examine the characteristics of the local drainages, geology and hydrology. We also reviewed information in our files related to the geology, hydrology and mine plan.

BBA had previously provided recommendations for ground and surface water monitoring points in a letter to you dated January 6, 2014 and monitoring wells were installed and monitoring completed at those points as a result of the recommendations provided in that letter. Those monitoring points were provided based on our understanding of the mine facility locations as they were planned at the time.

Mine Plan Updates

Since the existing monitoring points were installed, we have learned that the updated mine plan will result in milling facilities and tailing piles farther to the northeast than was previously anticipated. As a result, the existing ground water and surface water monitoring points may not be located to adequately sample and monitor for possible impacts resulting from all planned milling and tailing activities. We are providing recommendations for future ground and surface water monitoring points located farther down gradient, intended to monitor ground and surface water for any changes resulting from all of the planned mining activities, including the mill and tailings.

Figure 1 presents the locations of the existing ground water monitoring points and the conceptual / generalized locations of the future tailing repository and the mill site. We have also shown on the map the estimated downgradient extent of tailings and mill facilities. When we met and visited the site, you demonstrated to me your understanding of downgradient extent of these facilities. To be conservative and to maximize our confidence that the proposed monitoring locations adequately capture downgradient impacts, we shifted the estimated downgradient extent slightly (approximately 400 feet) farther to the north and east of the location identified in the field. We recommend that a future ground and surface water monitoring point is located slightly downgradient of this estimated downgradient extent of tailings and mill facilities.

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Proposed Future Ground Water Monitoring Point

Figure 1 shows the "Proposed Future Downgradient Well Location", which is the location at which we propose to construct a future monitoring well. We staked a location in the field and confirmed that this location should be accommodating for a monitoring well, including site and rig access. It is our opinion that the existing monitoring points provide adequate baseline data for down gradient impacts, and this proposed new well does not need to be constructed until the time at which tailings are placed at the proposed repository or the mill is constructed at the site.

The location of the proposed well site is as follows:

- Section 14, T19S, R71W, 6th P.M., 862 ft. west of the east section line and 2,373 ft. north of the south section line
- X-UTM: 47,4297, Y-UTM: 4,249,578

We suggest the well is constructed similar to the existing monitoring wells with 4-inch PVC casing and 20 feet of perforated casing in the production zone of the well. The well should be constructed to an adequate depth to produce ground water, which may be in shallow alluvial materials, or it may be necessary to drill deeper into the hard rock bedrock formations. The well should be constructed in accordance with the "Rules and Regulations for Water Well Construction, Pump Installation, Cistern Installation, and Monitoring and Observation Hole/Well Construction 2 CCR 402-2".

Proposed Surface Water Monitoring Point

We understand that there will be an overlap between the existing surface water drainage and the tailings. We further understand that it will be necessary to either divert the drainage around the tailings or perhaps install a culvert below the tailings. We do not know at this time which solution will be implemented to address this issue, but whatever solution is implemented will likely create a change to the existing drainage way. We are therefore not able to recommend a specific monitoring location for surface water in the drainage. Instead we recommend that an appropriate location is selected below the tailings and the mill that captures water draining from those facilities. We anticipate that a location in the drainage close to the proposed ground water monitoring well will be adequate, but this must be confirmed after the plan for the surface drainage improvements are better understood.

As always, please let me know if you have any comments or questions or need any additional information.

Very truly yours,

BISHOP-BROGDEN ASSOCIATES, INC.

Chi & Saus

Christopher J. Sanchez, P.G. Principal

CJS/jeb
Enclosure
1307.00

