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Dr Jill Woodworth
Service Group Manager – Environment and Water
Principal Environmental Scientist – Ecotoxicology
GHD

Dear Jill,

RE: Vista Gold Australia Pty Ltd - Receiving Environment Monitoring Program Design 2017

I have reviewed the Receiving Environment Monitoring Program Design 2017 in association with the report of the Mt Todd Aquatic Monitoring Program undertaken by GHD on behalf of Vista Gold, as required under WDL 178-4; and the Waste Discharge License 178-05.

The scope of work is described as follows:

Condition 38 of WDL 178-05 dictates that Vista Gold prepare a Receiving Environment Monitoring Plan (REMP) that is capable of measuring and reporting on the level of impact (if any) of wastewater discharges on the Beneficial Uses that have been declared for the Edith River. The Plan does not discuss WDL monitoring requirements in relation to water storages, release points or groundwater. The water quality results collected by Vista Gold as described in the Water Management Plan and for WDL requirements are an integral part of the interpretation of the biological monitoring and sediment monitoring results.

The 2017 plan includes physical habitat assessment, water and sediment quality analyses, and biological monitoring. The monitoring methodology, as described in Section 3, is based on the application of nationally recognised scientific methods, analyses and interpretation. The macroinvertebrate sampling methods and protocols, including reporting of abundance, taxonomic richness, PET richness, SIGNAL 2 scores, the AUSRIVAS Darwin-Daly predictive model scores and bands, and multivariate analyses (NMDS and ANOSIM) are nationally recognised approaches that provide diverse lines of evidence regarding biological impacts.

The application of these methods and approaches is demonstrated in the Mt

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Todd Aquatic Monitoring Program Report 2015-2016. The report describes the assessment of aquatic health in the Edith River to determine if treated mine water discharged through the discharge point RP3 has an adverse impact on the downstream receiving environment. The assessment included sampling of water and sediment quality, and macroinvertebrate community composition. Stow Creek, which flows through the Mt Todd mine site into the Edith River, was also assessed for aquatic health to provide Vista Gold with a further understanding of any potential impacts of mine run-off in other areas on the Mt Todd site.

The findings of the 2016 report include the following:

- the results from the 2016 monitoring round are consistent with the previous year's monitoring event, showing no discernible impact from treated mine water discharged from RP3 on the Edith River aquatic ecosystem;
- water quality in the Edith River is relatively benign in terms of toxicity potential; iron is the only parameter elevated above the site-specific trigger value;
- sediment quality along the Edith River showed no elevation of parameters above ANZECC guideline levels;
- macroinvertebrate results were similar to the previous year's monitoring event, with samples from the Edith River showing no significant community change as a result of the RP3 discharge;

These results are comprehensive and indicate that the approaches described in the Receiving Environment Monitoring Program Design 2017 are scientifically-based, informative and appropriate.

Sincerely,

Professor Jenny Davis
Head of School
March 29, 2017