## SSD 7172 HUME COAL PROJECT & SSD 7171 BERRIMA RAIL PROJECT MY RESPONSE TO A SUBMISSION BY HUME COAL'S CONSULTANT (EMM) DEALING WITH COMMENTS MADE BY ME DURING AND AFTER THE IPC PUBLIC HEARING REGARDING THE REJECTS EMPLACEMENT SYSTEM PROPOSED FOR THE PROJECT

## **Dear IPC Commissioners**

I refer you to Hume Coal's detailed paper prepared by their consultants EMM and dated 12 April 2019 addressing objections raised by me with respect to the proposed rejects management proposal. I have to say I am wary of engaging in an ongoing war of words with Hume, and I am also finding it difficult to come to grips with a proposal that is very nebulous at worst and highly conceptual at best. However, I am concerned that no reply from me would be taken as acquiescence to Hume/EMM's contentions, and I would not like that to happen.

Therefore, please find my comments on EMM's paper below:

- The multitudinous references provided by EMM almost exclusively refer to overseas situations that no doubt have very different operational imperatives and approvals regimes to those pertaining to the Hume Project. Therefore, I consider that they have little relevance to this discussion. I would have thought one or two very comparable case studies from other mines would have been much more convincing.
- It is interesting to note that EMM has chosen to include the Metropolitan Mine as a relevant case study, as this project was included in my original objecting response to the EIS as an example of the time and effort required to achieve success in pumping rejects back underground. This mine also has the safety net of being able to continue to truck out rejects until they achieve 100% emplacement. I have seen no evidence (including in the EMM paper) that this 100% emplacement has yet been achieved even after several years of operation.
- EMM also states that the situation at Tahmoor is different to that for the Hume project. That is certainly true, including the fact that they have an inbuilt safety net with an existing REF. It is also worth noting that one of the main reasons why the 100% emplacement option was rejected by SKM was because of the likely low availability in fill plants (~70%), which would surely be the same for the Hume project's plant.
- The EMM paper outlines a number of long-distance pumping situations using the chosen Geho piston pump. All of these involve highly engineered products with narrow size ranges and consistent quality nothing like the material envisaged at the Hume project. I would also guarantee they did not undertake such important and potentially show-stopping activities without long and detailed physical and pilot scale test work.
- The EMM paper outlines a novel method of reject emplacement presumably prompted by the safety concerns for workers raised at the hearing. The method is so novel that it appears it has to be developed from scratch, which is never a good idea in a new project where things have to work well from the outset. This feeds into my final comment below.

- The EMM paper downplays the size and duration of the "temporary" surface stockpile. However, they mention a maximum size of 0.5 million tonnes, which I estimate equates to at least 250,000 cubic metres of volume. If you assume a 20 metre high stack, the footprint of the stockpile must cover 3-4 acres when rill angles are taken into account, which is large enough to raise concerns regarding risks and impacts. In my previous project roles, we would have been required to choose a location, do a design and establish a management plan for such a large pile of material before the project could be approved.
- Hume/EMM states that I have incorrectly assumed that one of the sources of make-up water would be water recovered from the rejects, which I had assessed would be very difficult to do in the circumstances. However, Appendix E Volume 4A of the Hume EIS includes a Water Impact Assessment by EMM that clearly designates one of the main components of water being pumped from the underground sump to the Primary Water Dam as "Co-disposed Reject Decant" (Main Report Table 5.2 Page 47). I had therefore assumed that if this PWD is a source of water for the to the CPP and the rejects plant then this decant is an important overall element.
- My final comment on all of this is that I am astounded that a project of this size and complexity could be given the go-ahead without one of its mission critical components being proven up. The fact that they seem to have allowed 12-18 months from start-up to get the rejects system working must be of concern. It begs the obvious question "what if they can't make it work satisfactorily for operational and/or economic reasons over that period?". I can only assume that the proponent thinks that it will be very hard for the then powers that be to stop such a project once it is up and running.

Yours faithfully

Derek White 23/04/2019