

Commissioners, my allotted time of 5 minutes is nowhere enough for me to present my full submission so I have prepared a short list of some of the points raised. I have provided my full submission including attachments to your representative. I trust that the Commissioners will take the time to look over the Submission and the attachments.

A short dot point list and summary of matters raised in the submission to this Vickery Mine Expansion is as follows:

1. An almost complete lack of good quality recent and long term studies into the overall effects that this Mine Expansion will have on the water resources of Namoi Valley, Gunnedah/Oxley Basin ground water, Namoi River and Alluvial Flood Plain, and the Great Artesian Basin via the cumulative effects of all and expanded mining/extractive developments.
2. Concern that the EIS not taken a cumulative effects approach when dealing with environmental matters, and other well established agricultural industries. All this EIS does is look at the effects the Proposal will have in isolation, instead the EIS should be looking into any cumulative impacts that this Expansion is likely to add to the already known cumulative impacts on the Namoi River, the Gunnedah/Oxley and the Great Artesian Basin Southern Recharge Area, that mining and extractive industries of the Area already have.
3. The final void and the effects it will have on groundwater-quality, flow rates and flow direction, salts carryover onto adjacent land due to heat and wind.
4. The poor quality, in the EIS, of the geology of the area and the currentness and detail of the information. Comparison example given showing that a 2018 Dol Land and Water Well Completion Report has a very detailed description on the geology under their Groundwater Monitoring Bore nest located in the Pilliga Sandstone of the Great Artesian Basin Southern Recharge which has put paid to the notion that the so called Pilliga Sandstone of that area was all solid.
5. Concern about how was the flow rate and directions of the Groundwater determined and at what depths was this done along with whose Coefficient was used (Wills-Biot being one) and the value of that coefficient, taking into account the permanently retained water within a "rock" or Strata, the effect that surface weight such as trains, bridge pillions, water storage ponds, overburden piles and much more surface infrastructure associated with an open cut mine can have on the movement of groundwater. I must also mention that the open cut hole will have an effect of groundwater 'flows' due to pressure release on consolidated and unconsolidated aquifers below and adjacent to it.
I note that at a NSW Government Department has also raised a similar concern.
6. Suggestion that the NSW Chief Scientist carry out a full investigation similar to the CSG study, into the effects of the Open Cut Coal Mining in the area upon the whole of the Namoi Catchment area including the whole of the Gunnedah/Oxley Basin, the Great Artesian Basin and the Recharge Areas and make recommendations before this Mine Expansion is approved.
7. Ground water Ecosystems and Bacteria and their importance with regard to water quality as well as being an early warning of water quality change.
8. Generated dust, distant observations and the unknown effects of.

As a brief statement, on my long held opinion on mining, there is a more detailed description provided in the main submission; I just want to make this point perfectly clear.

I AM NOT AGAINST MINING, HOWEVER I DO HAVE SOME QUALIFICATIONS TO THIS SUPPORT:

1. There is respect all aspects of the environment.
2. There is respect for all the people in the area where you operate; this includes being fully transparent in all you dealings and answers to question.
3. There is total respect and abeyance of the Laws of the Land, Local by-laws/regulations and those who make and

enforce them.

If a company can comply with all of the above then they have my support, to date none have so I cannot support them.

Thank you for your time and I trust you will read my submission and the provided attachments.

Please excuse the title of one, no offence is intended by its inclusion.

Mr A J Pickard