Alan R Lindsay B.E. (Hons.) MIChE 'Pindari' 291 Wombeyan Caves Rd. Woodlands, NSW 2575 December 4<sup>th</sup>, 2023

### **RE: Sutton Forrest Sand Quarry Amended Application**

As a community member who is on record as having made a submission to the original June 2018 proposal for this sand quarry, I wish to register my objections to the amended proposal that was placed on exhibition on November 7, 2023.

The amended proposal suggests a re-arrangement of site facilities and changed access arrangements to reduce the exposure of nearby residents to the quarry operations, but serious concerns remain on the fundamental issues of groundwater, surface water, contamination of Long Swamp Creek, noise and associated hours of operation, dust, light pollution, re-habilitation of the mined areas and the impact on wildlife.

### **Overview**

The amended proposal was prepared by EMM consultants who have replaced previous consultants R W Corkery. The Southern Highlands community has much experience with EMM and their methodology, as they were the advisors for Hume Coal for the best part of a decade until the demise of that project following a decision of the Independent Planning Commission (IPC) in August 1021.

In compiling the documentation for the Hume project, EMM followed the pattern of engaging 'independent' consultants in the various areas of concern to assure government agencies and a very skeptical community that the project would have no detrimental impacts. There was, of course, the caveat that if problems arose, *adaptive management* would be employed as a correction. The problem with this concept is that not all the potential problems, particularly mining in difficult strata and damage to landowner bores could be overcome simply by a change in operating procedures. There was a high probability that court action and compensation would be involved. This was a step too far for the government and the IPC agreed.

EMM are following a similar pattern with the sand quarry project, but here they have been assisted by the DPE allowing just 27 days for the reworked quarry proposal to be evaluated by the community and objections submitted. Once again, the *adaptive management* technique is put forward as the remedy for any problems that arise, without any consideration of the fact that some of the issues may be insurmountable.

#### Adaptive Management and the sand quarry proposal.

Of the potential problems that are involved in this project, some will be almost immediately apparent, but others will take time to evolve. Dust, noise and light pollution will be apparent early and may or may not be easily resolved. However, problems with groundwater and surface water may not be obvious until some time into the project when the impact of the extraction and the backfilling operations are more fully developed. Impact on wildlife also falls into this latter category.

Operational problems identified early are difficult enough, with the prospect of legal action and the application of the provisions of the Voluntary Land Acquisition Process (VLAMP) potentially in play if quick and definitive resolution is not possible. However, pollution problems that develop over time

are of a different magnitude, as serious damage to key environmental assets may be irreversible and, in these cases, the VLAMP offers no solution. A bitterly fought closure of the quarry is the likely outcome.

Given the environmental risks associated with this proposal, it is vital that the approving authorities take the *precautionary principle* into account in their evaluation. Some problems cannot be reversed, and some projects should never be started.

### Additional Groundwater comments

These comments are additional to those made in my original June 2018 submission. The amended groundwater and surface water evaluations are a rework of the original but reaches the same conclusions: the project has minimal impact with regard to the NSW Aquifer Interference Policy and the proponent has adequate water licences to cover the operating requirements. EMM analysis claims that the numerical groundwater model is a 'class 2 model with many elements classified as meeting class 3 requirements', which is somewhat at odds with their peer reviewer, Hugh Middlemis, who prefers to assess the proposal as class 1 to 2 under the Australian Groundwater Modelling Guidelines. Mr Middlemis is otherwise fully supportive of EMM's analysis.

EMM refer to Mr Middlemis as an 'independent pre-eminent hydrogeologist' and there can be little doubt on his contribution to numerical groundwater analysis and guidelines over the last 2 decades. However, he has a chequered history regarding his recent consulting work in the Southern Highlands. In 2013 he appeared as a witness supporting Boral's application to double the production of their Berrima coal mine to 500,000 tonnes per annum. To Boral's disappointment in a Merits hearing before the Land and Environment Court, he reluctantly agreed that the mine had significantly dewatered the mined area. The application was dismissed for this and other reasons, and the mine subsequently closed.

Mr Middlemis was also engaged by the DPE to assist with their evaluation of the Hume Coal Project. In this instance his review of the groundwater modelling completed by Hume's independent hydrogeologists supported the conclusion that the model was 'fit for purpose' and was 'class 2 with elements of class 3'. Part of the rationale for this rating was the purported correlation with data from the Berrima Coal mine, which had been assessed by Mr Middlemis in his evidence in the Boral case as barely adequate. EMM's John Ross, who signed off on the Sand Quarry amended groundwater report also provided a submission on the quality of the Hume groundwater model and its link with Berrima.

The problem for Mr Middlemis (and EMM) in this instance was that groundwater experts within the DPE strongly disagreed with the results from the Hume groundwater model and the Department ultimately supported their position in submissions to the Independent Planning Commission which rejected the Hume Proposal in August 2021.

Groundwater analysis is highly dependent on the assumptions employed, and while the numerical analysis techniques that have been developed are the best tools available, results can be readily manipulated by minimising the uncertainties involved. Based on my experience in dealing with EMM and the numerous groundwater consultants (including Mr Middlemis) that were engaged on the Hume Project, I have little confidence in their conclusions that nearby residents and the local environment have nothing to fear from the quarry project.

A significant risk to groundwater and surface water is the backfill proposal. The introduction of foreign material will have unknown consequences for the environment, particularly Long Swamp

Creek. Given the short time that has been given for community response to the amended proposal we can only hope that environmental authorities are alert to the potential long-term problems that can result.

# Comments on hours of Operation.

The proponents of the quarry project are requesting maximum flexibility in hours of operation and offer several comparisons with other quarrying operations. The relevance of these comparisons can only be measured when the circumstances of each operation are examined, particularly proximity to residences. On notable omission from comparable sites is the Benedict Sands operation in Wombeyan Caves Road, where transport of products is not permitted before 6 am and not on Sundays or public holidays. The site closes at 4 pm daily.

Given concerns over noise, light pollution and the impact on wildlife the case for restricting hours of operation is strong should the community have the misfortune to have to endure the operation of this quarry.

# **Concluding Comments**

The short time frame allowed by the DPE prevents a more detailed and incisive analysis of the data put forward by EMM on behalf of the proponent. The statements made by EMM that the proponent wants a good relationship with the community are contrary to the experience of those directly involved where a letter box drop has been the only communication received.

The DPE has advised that it is not the intention of the Minister for Planning and Public Spaces at this time to hold a public meeting. Those affected are being given little opportunity to challenge the approval of this project which will have the potential to impact their well-being, and with the data in the amended proposal being presented as fact when considerable doubts exist.

This is not a consultation process; it is an ambush.

Alan Lindsay