My wife and I are the property owners at 160 Hanging Rock Rd, our property adjoins the property that is proposed for the Sand Mine.

This is my initial submission of objection regarding this development. Further information and documentation will follow this submission regarding the specific areas of concern noted.

My objection will try to remain factual and objective, but I will say from a personal perspective that my wife and I have plans to shortly retire and build a new home at our Hanging Rock Rd property, and regrettably these plans will certainly not proceed if this Sand Mine development goes ahead.

Firstly I would like to express my concerns over the lack of consultation regarding this development proposal.

A letter from the NSW Planning Dept (rep David Kitto) dated Feb 2014, (copy of letter in EIS under Appendix 1 and Cover) requests the Developer to "consult during the preparation of the EIS and to show evidence that all issues raised during consultation with the community have been addressed."

So what has the Developer done to consult since 2014? Answer - Very little.

I can honestly say that the first I ever knew about this proposed Sand Mine was from reading a RW Corkery Consultant letter, addressed to "the Householder", that had been jammed into the timber palings on the front gate on my property, in March this year, 2018. I attended a public information session held by Developer (after the lodgement of the EIS), at the Sutton Forest Winery on 2nd June, 2018, where I raised some of my concerns with their representatives. I only knew about this session because one of the neighbours had informed me about it, certainly not because I had been informed by the Developer. I have never had anyone representing this Mine development contact me, other than the one letter stuck in my front gate.

This 'last minute' consultation by the Developer is tokenism. No genuine effort has been made to consult with the neighbours, nor the community as requested by NSW Planning.

The other main areas of concern that I have regarding this development relate to (but are not limited to) the impact on :

- Noise
- Traffic
- Airborn Dust
- Groundwater
- Long Swamp Creek

NOISE

I have read through the "Noise and Vibration Impact Assessment" Vol 1 Part 4, part of the EIS submission.

I have some real concerns regarding the information contained in this report.

I have extracted the following summary information from the report to make my point of view:

- 32dbA - Penrose Park 2013 average Background Noise Level RBL (night) , Table 7, considered same as 2018.
- 37dbA – Project Noise Trigger Level LAeq, Table 7. This is regarded as the Intrusive Noise Level under the NPI (NSW Noise Policy)
- 52dbA – Max Noise Level allowable , Table 8
- 28dbA – Predicted Noise Level at Penrose Park (night) during Mining operations, Table 14

The summary of the above data shows that the noise level at Penrose Park will be less (28dbA) once the Mine is in operation , compared to now (32dbA). How can this be possible?

Consider this also, information from the report states:

- Figure 9 Noise Contour model shows a 50dbA contour reading at the mine excavation site (Scenario 1)
- Scenario 1 – 2xBulldozers (121dbA each), 1xExcavator(112dbA), 2xHaul Trucks(113dbA each),2xfront End Loaders(109dbA each), Truck movements in/out of Quarry(109dbA each), operating Wash Plant and operating Screening Plant (??dbA), with all of these machines producing between 121dbA and 109dbA
- Surely all the combined noise from this machinery will be at least 125dbA?
- Yet the Report says the reading at the Mine excavation area would be 50dbA.

Now do the simple maths, let's just take 1 Komatsu Bulldozer

- Komatsu 475 Specification claims operating noise is 110dbA at 16m distance (ISO6395)
- As a general guide, sound reduction decreases with doubling the distance by 3 to 6dbA, so lets use 6dbA (best case) as an example,
    - 110dbA at 16m distance, equates to
    - 104dbA at 32m
    - 98dbA at 64m
    - 92dbA at 128m
    - 86dbA at 256m
    - 80dbA at 512m
    - 74dbA at 1024m
    - 68dbA at 2048 m
- So in rough terms, even 1km away, the sound level would be around 70dbA, way above the 52dbA Max Noise Level allowable , Table 8.

The above data is for consideration of the modelling in the Noise impact Assessment report which shows totally unrealistic readings of noise. Even given the variation in land height, hills, forests etc protecting or muting noise, the information in the report does not seem to have any credibility.

As previously stated, the combined noise from the machinery at the Mine site will be at least 125dbA, possibly more, yet the report claims a 50dbA reading at the Mine site, THIS IS NONSENSE and must be challenged or completely overruled.

No consideration in the Noise report has been given to the neighbouring properties that are elevated above the tested areas. My property residence is at least 20m+ elevation above where the noise readings were taken at Penrose Park. From experience, the noise heard from the Hume highway is far greater at this higher level of my residence due to the fact that sound travels over the forest tree line. There is little obstructions for the noise to be mitigated and hence the noise from the Mine site will be heard easily for residences R18 and R19, which have elevated building locations.

I intend to gather more data regarding this (including noise readings) to challenge the Noise Report further. I believe the Noise Report is biased and does not present true facts.

We can, from our property residence, clearly hear trucks on the Hume highway in the vicinity of the proposed Mine site entrance, especially at night and with a S-E breeze. The noise is often quite loud, enough to wake you from your sleep. So I have no question in my mind that we will hear the noise from the Sand Mine , especially during times when there is a S-E breeze, which is quite a large portion of the year.

TRAFFIC

We don't need another 50 B-Double Heavy Haulage Trucks on our roads every hour. Apart from the noise these trucks will generate, there are other issues that need further consideration.

- Trucks leaving the Mine site will merge into the north bound Hume H'way. This merge area will be at the same location where up to 130 vehicles per hour traveling north exit the Hume H'Way to stop at the Sally's Corner (Shell Service station and McDonalds). This could generate an unsafe situation with vehicles exiting the Hume and trucks entering the Hume at differing speeds.
- The is a large discrepancy between the quoted Heavy vehicle numbers using the Hume highway in the EIS reports
    - The Noise Impact Assessment quotes 240 heavy vehicles per hour (page 4-6)
    - The Traffic Impact Assessment states the number of Heavy vehicles is 116 to 135 per hour (page 1-23)
- 240 vs 135, that a big difference. How can these Impact Assessment's be considered credible, when the data is so different?

DUST

I am not a dust expert, but I have seen first hand, machinery ripping / digging through sandstone. This process generates quite a lot of dust , very light dust that seems to float in the air.

I cannot see anywhere in the EIS that the mine proposes to instigate robust measures to control dust generated in the excavation process or in the crushing process.

GROUNDWATER

The Groundwater Impact Assessment states that ground water flow into the Mine excavation hole will reach 0.2ML per day, that's 200,000 litres per day.

My concern relates to the validity of this number, as I believe it should be far greater than this number.

Groundwater Impact Assessment Table 6 refers to Registered Bores within the area. The registered allowable drawdown from 10 bores within a 2km distance from the Mine site is 627 ML per annum, that equates to 1.7 million litres per day.

Even if these bores only take one quarter (1/4) of their licence allowance, the combined total would be 430,000 litres per day

The question I pose here is this:

If 10 small bore holes can withdraw water at roughly 430,000litres per day, then how can it possibly be true that a massive hole in the ground (the Sand Mine), roughly 1km long x 500m wide, will only leak water (from the same aquifer) at a rate of 200,000 litres per day. These numbers defy logic.

And if it turns out that the Mine leaks far greater water than the report states, then do all the local Bores dry up?

I respect that the theory and science of groundwater flows etc are complex, but the details in the Report need to be agreed by many experts before anything should be approved.

Aside from all this, who knows what the future contamination will be to the Groundwater when the Mine is backfilled with uncontrolled waste.

We owe it to our future generations to stop this from happening where we can not 100% guarantee the outcomes.

LONG SWAMP CREEK

The local area often receives intense rainfall, and the excess run off from rainfall or water used at the Mine site for washing, screening etc would ultimately flow to Long Swamp Creek, which is part of our water catchment system. This is a concern for the wider community.

Water from the area of the 47ha Mine site currently runs to Long Swamp Creek, however, this rainwater runoff will be contained within site for re-use. In addition to this the Mine site will require an additional 33ML of water per year for processing etc which the Developer states they need to acquire.

There appears to be a lot of unanswered questions regarding Surface Water.