

To whom it may concern,

This submission is in response to the recently released Environmental Impact Statement (EIS) for Hanson's Brandy Hill Quarry (BHQ) Expansion Project. As someone who works in environmental regulation and as a resident of Giles Road, I am extremely concerned about a number of the issues raised (or not raised) in the EIS. My main concern is the apparent disregard for the environment as well as the health, wellbeing and safety of residents of Seaham and Brandy Hill in favour of profits at all cost. I believe that the quarry's expansion should not be approved as I will explain through the points below.

48.65ha of habitat critical for the survival of the koala will be cleared

The land of Brandy Hill Quarry is confirmed koala habitat. I myself have sighted countless koalas over the past few years in BHQ land and in Giles Road, and I therefore have a personal interest in the survival of the species. All over Port Stephens LGA koala habitat is being cleared, adding to the vulnerability of the koala. Hanson states they will implement a Biodiversity Offset Strategy and a Biodiversity Management Plan, however, details regarding these are lacking. How will planting trees or rehabilitating land help the displaced koalas? It will take years for the trees to grow to sufficient height, and koalas will be highly stressed with the increased vegetation clearance, construction noises and blasts. They may even be driven out of the area. Clearing this land will be critical to the survival of this population of koalas and to do so would be irresponsible from an ecological perspective.

In addition, the koala sampling at the BHQ site was undertaken over 3 days and did not find evidence of any breeding females. This led Hanson to the conclusion that their land does not support an 'important' population of koalas. However, koalas are known to move around, especially during breeding season, so this should not be reason to dismiss this population of koalas and to clear their critical habitat.

Furthermore, State Environmental Planning Policy 44 – Koala Habitat Protection (SEPP44) is currently under review, which could have implications for the BHQ expansion. The BHQ EIS does not mention this at all. Hanson has used SEPP 44's koala habitat definitions, but these are one of the sections currently under review and may change in the future.

Hanson's noise, vibration and blast testing is inadequate and underestimates the actual impact

Hanson states their noise and vibration complies with criteria and is within guidelines, but this does not necessarily mean the impact is insignificant. Hanson's noise and vibration sensors are located between 1 and 4.3km from the quarry. Samples were taken on two days during September 2014. However, only one was located on Giles Road (at 1km) – N01. I reside further down Giles Road at 3km from the quarry and can feel the vibrations and hear constant crushing, machinery and vehicle noise from the quarry from as early as 6am. Due to topography, the N01 noise sensor is protected from the quarry site by Little Brandy Hill. Further down Giles Road can be more exposed, so is likely to receive more noise pollution.

Hanson is planning on operating the quarry overnight, which is a major personal issue. The EIS claims the quarry will be generating "One or two noise events per night within maximum internal noise

levels of 65-70dB (A)" which "Are not likely to significantly affect health and well-being". There will also be up to 9 truck movements per hour during the night time, which equates to one truck every 6-7 minutes. In Giles Road, nights can be very still and quiet with little to no background noise. Any noise travels a long way and can easily cause awakening, and I am certain that myself and my family will be negatively impacted by the noise of the quarry operating during the night.

The EIS states that "Hanson will conduct annual noise monitoring to demonstrate compliance at the nearest sensitive receptors unless otherwise approved by the Secretary of the DP&E.". In my opinion, annual monitoring is insufficient and may not consider the full range of conditions including still nights or when an easterly breeze is blowing from the quarry down Giles Road, as the evening sea breeze often does.

Currently the quarry blasts approximately 20 to 25 times per annum, however, blast-like incidents can be felt much more frequently. Experiencing a blast is an unpleasant sensation. The house and ground shakes slightly, and you can feel a low rumbling throughout your body. The current level of blasting is bearable, but future increases may be detrimental to quality of life and possibly even mental health and wellbeing.

While BHQ's noise, vibrations and blasting may comply with limits, they can be noticeably heard and felt at least 3km away. This negatively impacts on quality of life, and with the quarry's expansion I can only imagine how much worse it will become.

Traffic on surrounding roads will be increased dramatically

Hanson has stated that truck movements to and from the quarry will increase to 524 vehicle trips per day, with up to 150 vehicle trips per hour during peak times. This equates to one vehicle every 24 seconds. Hanson also states that the existing road network currently has significant spare capacity to cater for traffic growth. However, traffic volume data was collected in September 2014 and noise traffic data was collected in March 2015, over two years ago. This data may well be out of date and does not consider other factors such as travel time or school bus movements.

Driving down Brandy Hill Drive and onto Seaham Road behind a Hanson truck can be quite dangerous. The large trucks reduce visibility and slow down general traffic substantially. This can frustrate drivers who are stuck at 45km/h in a 90km/h zone (around Nelsons Plains), potentially causing them to attempt to overtake the trucks in dangerous situations. In addition to the school buses on Brandy Hill Drive and Seaham Road, the increased heavy vehicle traffic caused by the quarry expansion will undoubtedly lead to more accidents and potentially even fatalities.

Hanson claims they will mitigate any road traffic impacts on the environment by limiting truck movements outside of standard operations where reasonable and feasible. However, Hanson also says it is essential to operate and transport materials outside of hours to maintain efficiency, acknowledging that there will be up to 9 trucks per hour during the night.

Furthermore, the extent of Hanson's proposed management practices for traffic noise reduction is based on improving driver behaviour. This is not easily enforced or managed, and highlights Hanson's lack of concern for the day to day life, comfort, safety and wellbeing of the community.

In my opinion, the traffic assessment is insufficient which could lead to considerable and dangerous impacts on the environment and the community.

Air quality monitoring is insufficient

Firstly, Hanson's air quality assessment is based on monitoring undertaken at Beresfield and modelled for Brandy Hill Quarry. Based on my own experience with similar models, I am fully aware that models often do not provide the full picture and are definitely not a substitute for actual air quality data. Air quality monitors at Beresfield are more likely designed to monitor pollutants from coal trains, rather than the type of pollutants and particles at Brandy Hill Quarry. PM₁₀ and PM_{2.5} especially are harmful to human health, so it is important that monitoring is thorough. To date, Hanson's air quality monitoring is not.

Secondly, while Hanson claims that their air quality emissions fall within applicable criteria, they fail to mention changes in two major government documents. The Clean Air for NSW consultation paper is currently under review, while the EPA's Load Based Licencing Scheme is in the process of being reviewed. The EPA's Load Based Licencing Scheme relates to the release of pollutants including air and water pollutants, and the overwhelming majority of submissions to the scheme highlight the need to more strictly enforce mine and quarry pollutants. This may impact on Brandy Hill Quarry in the future, and so must be considered now.

The quarry expansion claims for be 'for the community' but dismisses key social issues

The EIS claims that it will create jobs and provide benefits for the local community. However, only 10 additional jobs will be created over a 30 year period. 10 jobs are a poor consolation for the constant disturbance the quarry expansion will create for the local community. Undoubtedly, there will be more negative impacts on the surrounding communities than there will be benefits. Negative impacts were explained above and include;

- Decreased safety: on local roads due to increased truck movements
- Decline in quality of life: due to increased noise, vibration and blasting
- Loss of environmental value: through impacts on the koala population and native vegetation
- Uncertainty in future environmental health: due to limited environmental testing and monitoring

While the EIS lacks certain important details, it is also so long that anyone without EIS experience would struggle to make any sense of it. This essentially isolates much of the community who are likely to be disadvantaged by the expansion's approval. Throughout the EIS I came across an unacceptable amount of grammatical and punctuation issues, which to me highlights a lack of care and consideration and does not give me confidence in the general findings of the EIS as a whole.

In summary, due to the concerns raised in this submission I do not support the proposed expansion of Hanson's Brandy Hill Quarry. I believe the expansion proposal is a clear example of placing profits before the concerns of the community and environment, and its approval would be irresponsible from a social, environmental and safety perspective.

Kind Regards.