BRANDY HILL QUARRY EXPANSION PROPOSAL

SUBMISSION

To: NSW Department of Planning & Environment

Re: Application 5899

9th April, 2017

I wish to register a formal objection in response to the above application lodged by Hanson Construction Materials Pty. Ltd. concerning the proposed expansion of the Brandy Hill Quarry, located on Clarence Town Road, Seaham, NSW, 2324.

The grounds for this objection are as follows:

1. LAND CLEARING

The proposal includes the planned removal of approximately 49 hectares (121 acres) of established native vegetation. This includes six plant community types (PCTs HU591, HU798, HU806, HU812, HU814, HU816), which form habitat for a wide range of native species. Hanson's Environmental Impact Statement (EIS) admits "*All native vegetation within the study area was deemed to be in moderate or good condition with all PCTs in the same broad condition*" (P160). This comment only serves to highlight the inherent value within and importance of retaining the vegetation, in order to maintain existing biodiversity.

Any reduction in quality native forest only puts further pressure on species that are already vulnerable due to the ongoing impacts of human activity involving land clearing. Purchasing an offset in another area does not represent any sort of assistance to the plants and animals of the established ecosystem that would be impacted by the proposal. It is contentious that "offsetting" provides any benefit at all, considering that the offset land is almost always already forested. True offsetting would require the planting/replacement of forest on bare land, equivalent in area to that being destroyed.

At a time when climate change is now known and recognised by legitimate science as a real threat to human activity, yet Australia is maintaining one of the worst greenhouse gas emission levels in the world, the unnecessary removal of a carbon sink and its replacement with a carbon generator makes no long-term sense.

2. THREATENED SPECIES

The Biodiversity assessment is manifestly inadequate, having undertaken only six (6) days study of the area, four days in winter and two in spring. This short period is unable to account for species that are migratory, feed sporadically in the area or are otherwise

transient or present in the area for limited periods of time. Species that are more active or more likely to be located in summer or autumn have effectively been ignored.

As a long-term resident of property that immediately adjoins Hanson's land, I am able to confirm the presence of koalas in the area as permanent residents and have both witnessed and heard mating on a number of occasions (the latter quite frequently). Vulnerable grey-headed flying foxes are also frequent nocturnal visitors, depending on available food sources (largely flowering eucalypts). Both species, however, can easily go months without a sighting – their absence is not indicative that they don't exist. Likewise, their absence in a fauna survey is more likely to be a result of the sampling strategy than their total absence from the landscape.

While the other threatened species named in the EIS have not been sighted, native species that have been recorded here at various times since 2000 include:

Brush-tailed phascogale	Sacred kingfisher	Burton's legless lizard
Squirrel glider	Eastern spinebill	Water dragon
Sugar glider	Yellow eared honeyeater	Bearded dragon
Brown antechinus	Scarlet honeyeater	Lace monitor
Red-necked wallaby	Wonga Pigeons	Diamond python
Swamp wallaby	White-headed pigeons	Red-naped snake
Wallaroo	Bar-shouldered dove	Eastern brown snake
Echidna	Shining bronze cuckoo	Red-bellied Black snake
King parrot	Tawny frogmouth	Red crown toadlets
Wedge-tailed eagle	Southern boobook owl	Peron's tree Frog
Peregrine falcon	White-throated nightjar	Rocket frog
Superb blue wren	Glossy black cockatoo	Littoria Fallax
Variegated fairy wren	Eastern whip bird	Donkey orchid
Red-browed firetail	Satin bowerbird	Green-hooded orchids
Spotted pardelote	Purple swamp hen	...and more

These are in addition to some very common species which are found over a wide area of NSW. The commissioned biodiversity survey implies that the area has little vegetation of interest and is largely barren of wildlife, which we know to not be true, as the list above demonstrates. All the above species and more were located in an area almost half the size of that proposed for clearing. It is undesirable that such habitat be further fragmented by large scale clearing, in order to avoid further species be classed as vulnerable or threatened.

A senior, experienced ecologist acquaintance commented to me that the absence of a species from a fauna survey, such as this, is far more likely to indicate flaws in the sampling protocols than an actual absence from the landscape. It has been suggested that the bait that has been used in the Elliot Traps is missing a key ingredient and that the traps were too closely spaced over an inappropriately small area to produce an accurate result. It is hardly surprising that there are relatively few animals living right next to a large, operational quarry. Instead it would be more appropriate to sample out beyond the proposed expansion zone to ascertain which species are ultimately likely to be displaced. The fauna survey, therefore, should be considered of little value in assessing biodiversity.

3. NOISE

As one of the participating properties cited in the noise study included in the EIS (Appendix 9, Property NO6 & R9), we consider that the study was fundamentally inadequate to truly assess the noise impact of the quarry's existing operations. The noise received here varies significantly with climatic conditions and can range from virtually non-existent to moderately intrusive. In particular, the presence of heavy cloud cover and/or south-easterly winds promotes transmission of the noise in this direction.

The week during which noise monitoring was undertaken here was fine, clear and with the prevailing (at that time of year) north-westerly winds blowing mildly. Low noise levels from the quarry are unsurprising under these conditions, the results failing to reflect the variety of different conditions experienced by residents. I note that the sample size for the noise survey is exceedingly small and participants may well have been chosen to minimise the number who are affected by road noise, which is a prime concern of a significant proportion of local residents – but not here. The survey, as it stands, does not adequately address the issue of different noise sources and different meteorological conditions.

4. BLAST

As noted above, this location is cited as one of those used in the blast study. However, the EIS (Appendix 10) makes no direct connection between blasts at the quarry and the recording device placed on-site, failing to define any specific, recorded value regarding the force of blasts as experienced here. I was home for the entire week of the recorder being present, during which time no blasting was noted to have occurred. No ongoing monitoring beyond that one week period was undertaken. We would therefore submit that the lack of data on blasting is because no blasting took place during that period, or any blasts detonated were unusually small in size. Historical analysis of blasting readings taken on-site at the quarry does not and cannot accurately consider the noise and vibration impacts that are actually experienced by residents. The blast impact assessment is based entirely on assumptions concerning the way in which blasts have been conducted in the past and may bear no relationship to procedures that will be used as production at the quarry is increased and the footprint expands.

There is also a statement in the EIS that blasting takes place "*approximately 20 to 25 times per year*" (P224). More recent experience is that blasts occur most weeks, more likely 40-45 times per year, sometimes with a significant impact felt, even indoors. The stronger blasts have noticeably shaken the entire house, rattling windows, doors and the contents of cupboards. While blasting was barely noticeable in the first ten years of residence (2000 to 2010), it has steadily increased in strength and frequency since then. At the same time, no damage to property was noted during that first decade, but I am now able to identify a number of areas of damage to my home which have only occurred in that latter period as blasting has increased, some examples of which are shown in the images below .

Building damage occurring since 2010, clockwise from left: Significant crack between sandstone quoins; Crack in ceiling plasterwork; Crack in ceramic floor tile; Crack in external brickwork

5. DUST AND AIR QUALITY

On a clear, still day, the air above the quarry site is filled with a large, brown, dust cloud, clearly visible from south of Wallalong township, a straight-line distance of approx. 5 km. Although not always so visible, this dust is produced every single hour of the quarry's operations and dispersed over a wide area around the site, depending on wind conditions. Dust-related lung disease is now well recognised by medical professionals as a real and growing health concern, especially where humans are chronically exposed to fine particles. While visible dust is often focussed upon, the greater danger lies in the ultra-fine particle range, which also includes the particulate portion of vehicle emissions.

The expansion of the quarry will only increase dust emission and the addition of concrete products (a clearly identified source of lung disease) to the mix (by installation of concrete batching and recycling equipment) poses a real and direct threat to the health of all local residents. The air quality assessment provided in the EIS is inadequate, as evidenced by the following statement from the EIS: "*PM_{10} is not currently monitored for compliance in the vicinity of Brandy Hill Quarry and therefore substitute data was used from Beresfield*

monitoring station which is the closest monitoring OEH monitoring station to the site. The station is located approximately 14.2 km south west of BHQ." (P236)
Substituting data for an entirely different site so far away does not bear scientific analysis. Likewise, other significant particles $PM_{2.5}$ and TSP are not monitored at the Brandy Hill Quarry site. This calls into complete doubt any results of dust and air quality assessment.

6. SCALE OF PROJECT

The area in which Brandy Hill Quarry sits is predominantly residential and rural in nature. There is no other industrial infrastructure within at least 8 km of the quarry. At the time that many of the residents bought property in this area, the quarry was a small-scale, locally-owned operation supplying largely road base to local construction projects and operating close to normal business hours on weekdays. Since Hanson purchased the quarry, the scale of operations, traffic generated and the hours during which the quarry is functioning have already increased significantly.

The proposed further expansion is totally out of scale and out of character with the area in which the quarry sits and represents a burden the residents of the area will have to bear for three decades. Furthermore, it introduces new elements which are beyond the scope of the extractive industry for which the site was originally approved. A concrete batching plant and concrete recycling facility are not essential to the extractive process and are far more appropriate to an existing industrial estate. It would be unsurprising if Hanson were to close their Raymond Terrace and East Maitland concrete facilities and consolidate their batching operation to the Brandy Hill site, which is effectively a simple method of reducing their overheads, at the expense of the residents of Seaham and Brandy Hill.

Furthermore, if this proposal is approved, it will establish a clear precedent for industrial development in the area. Once this happens, it will prove impossible to control in the long-term, with other industries further adding to the noise, pollution, dust, traffic and environmental woes that the quarry expansion started. Not having been identified for this type of development in long-term plans, residents here have a right to live their lives in this area, in the clear expectation that it retains its original nature.

7. TRAFFIC AND ROADS

The road system in this part of Port Stephens LGA is entirely local roads, infrequently maintained by the Port Stephens Council. Essentially, there are 3 main routes quarry trucks use for quarry access, all with single carriageways:

a) Via Brandy Hill Drive & Seaham Road, to Raymond Terrace & Newcastle: This is the most common route and uses a relatively poorly maintained road (Brandy Hill Drive) through a predominantly rural-residential (small acres) area, before turning on to Seaham Road, the best-maintained of the roads in this area. After 16 km and an intersection with a poor accident history, dual carriageway is only encountered in the suburban area of Raymond Terrace and beyond.

b) Via Clarence Town Road & High Street, to Hinton and East Maitland: While Clarence Town Road is considered a main road, it has sections in very poor condition and with narrow or no shoulders. After passing through the township of Wallalong, a historic, single-lane, wooden bridge is encountered at Hinton, then another similar 2-lane bridge at Morpeth township. Local, residential streets are the predominant exit leaving Morpeth.
c) Via Clarence Town Road & Paterson Road: As noted above, Clarence Town Road is of variable quality. After passing through the township of Woodville, a (different) historic, single-lane, wooden bridge is encountered, then the trucks must negotiate the residential areas of the outer suburbs of Maitland, with dual carriageway only encountered after the town centre at approx. 18 km.

Other access could also be gained to the east and north-east by passing through Seaham township itself, or to the north-west in the direction of Paterson. In every single case, quarry trucks are obliged to negotiate narrow carriageways with dangerous edges and/or predominantly residential streets and/or roads with poor surface quality.

The quality, width and shoulders of the haulage routes are, in each and every case, manifestly unsuitable for large, heavy vehicles (typically an articulated "truck and dog" unit). Many of the roads are narrow to the point that it would be impossible to accommodate two trucks passing each other and a cyclist at the same moment, with shoulder quality so poor that drivers risk losing control of the vehicle if they stray off the sealed surface. Large potholes occur regularly, but are only repaired on an *ad hoc* basis. Port Stephens Council is widely acknowledged amongst locals as being utterly neglectful of residents of West Ward, a situation which is unlikely to change in the foreseeable future.

The expansion of the quarry's activities represents an unacceptable increase in heavy vehicle movements and, consequently, the risk to all local road users.

8. IMPACT ON PROPERTY VALUES

When purchasing in this area 18 years ago, the Brandy Hill Quarry was a known quantity and an accepted part of the landscape, but the purchase was made on the expectation that the quarry had a finite lifespan, commonly quoted as around thirty years (by locals and staff at Port Stephens Council). Thus, it was fair to assume that there was a possibility of a longer-term benefit to residents, in that properties may become more habitable and/or valuable upon cessation of quarrying activity.

In stark contrast, locals are now looking at a very real and significant reduction in property value, as a result of not only a quarry expansion, but the introduction of additional concrete batching and concrete crushing and recycling facilities, with the attendant additional traffic, noise, dust, vibration etc., as discussed above. Those who have retired to the area and those whose home is their principal investment will unfairly bear the burden of this proposal. There is no mechanism even mentioned in the EIS by which Hanson would consider compensating residents for the loss of their amenity.

9. INSUFFICIENT LOCAL BENEFIT

In addition to the issues already discussed, there has been little willingness shown by the proponent to contribute to the broader community. While a Community Consultative Committee was formed, virtually all of their input was discarded or ignored prior to the release of the EIS. Even a simple issue, such as the provision of school bus stops on Brandy Hill Drive, has failed to be worthy of consideration as a worthwhile contribution or gesture of goodwill towards the residents.

Effectively, residents of the Seaham & Brandy Hill area are being asked to suffer the development and all its negative impacts for the good of the Heidelberg Cement Group, an enormous, German-owned, multi-national corporation worth billions of dollars – and one which has no interest in the well-being of a small community such as ours. In return for the collective suffering of our residents and the environmental devastation inherent in the proposal, they have agreed to supply approximately thirty jobs for the life of the facility. I contend that this is paltry reward for the state of New South Wales.

10. REHABILITATION

While the site is earmarked for rehabilitation on a progressive basis, there is no guarantee that this will occur in a given time frame, or at all. Any rehabilitation undertaken will not mirror the current ecological value of the land (as it stands) within the next century. The works proposed only apply to that part of the quarry site that is "above ground", while the void which is projected to reach 78 m below sea level will remain forever. While the proposal is to allow the void to fill with water, it is just as possible that it could become a landfill site, which would further degrade the local area.

The EIS states that "*During the life of the quarry and site rehabilitation, changing circumstances may alter preferences for final land use(s). Community needs and expectations are a vital consideration in this regard*". (P297) I would contend that if Hanson is so concerned about community needs and expectations, then they would not be seeking approval for an expansion, but would accept that the quarry is reaching the end of its 30 year life span. Thus, I would also argue that the community will have little or no say in the final use of the quarry land, which is an unacceptable outcome.

The final form and use of the quarry would need to be determined in advance, with a significant bond paid by Hanson to the State of NSW, to ensure that the final outcome is achieved in the event that the site is on-sold, abandoned or sold by liquidators. The EIS prefers to assume that "*she'll be right, mate*", which is selling the residents short and offers no guarantee of a suitable outcome in 30 years' time.

The EIS also notes that Hanson will control noxious weeds as part of the rehabilitation process. Given that their buffer property is already heavily infested with weeds such as Fireweed and Lantana and that absolutely no control attempts have been observed in over sixteen years of residence, little hope is held that weed control will be undertaken in any form. Ongoing weed control practices would prove to be impossible to enforce long-term.

10. ALTERNATIVES NOT CONSIDERED

It rapidly becomes clear upon reading the EIS that Hanson is predominantly concerned with ensuring their market position in the building materials industry is not eroded, while causing themselves the least amount of trouble in maintaining a source of product. Little mention is made of the presence of a competing quarry (owned by Boral) on sparsely-inhabited Italia Road, Balickera, approx. 8 km east of Brandy Hill. This quarry is less than 2 km from the dual carriageway Pacific Highway, via an intersection which includes a dedicated lane for merging trucks. Expansion of this quarry could be undertaken with only a very small number of residents affected and little impact on local traffic flows.

Similarly downplayed, the other competing facility is the Daracon quarry at Martins Creek, which has the ability to ship its output via rail, which for safety reasons alone should automatically be the preferred option, wherever available. A receiving facility could easily be built on the copious vacant land around Newcastle's railway lines, thus avoiding the need for frequent truck movements on local roads.

The Daracon quarry has proposed expansion itself recently and the combined effect of these two proposals together has not been adequately considered, each EIS noting the presence of the other, but failing to model, in any fashion, the possible sequelae should expansion of both quarries receive approval. As Daracon's quarry uses some of the same haulage routes as Hanson's, dual approvals could rapidly make the lives of those living on Clarence Town Road or Brandy Hill Drive a complete nightmare.

Furthermore, there is no guarantee in the EIS that Brandy Hill Quarry will not be used as a *de facto* quarry to supply Sydney with rock products. The M1 Pacific Motorway is already congested on a regular basis and is a vital transport link in many respects. Increasing congestion on this heavily trafficked road with truck movements that could (and would) be better undertaken as short, local trips is not a sensible, long-term approach.

Careful development of other quarrying options, both in the Hunter Valley and the Sydney/Central Coast areas would be more practicable long-term, with far fewer negative impacts.

11. FUTURE RESIDENTIAL DEVELOPMENT

The Port Stephens LGA is very heavily burdened by land that is unable to be developed for residential purposes. The combined area of land that is adversely affected by aircraft noise (from Williamtown Airport, RAAF base and the Salt Ash bombing range), is set aside as water catchment, is swampland or subject to inundation/flooding, is State Forest or is National Park is very substantial. Combined with commercial development, industrial land and existing residential areas, there is a relatively small proportion of the LGA still available for future housing needs.

Of those areas, the northern half of West Ward is the most significant contiguous zone suitable for residential growth and the closest to existing infrastructure, facilities and

transport. Seaham is at the centre of that region and thus, there will be increasing pressure in the time ahead to remove the quarry from the area on the basis that it is singularly inconsistent with the surrounding land use. Traffic from any additional quarry development will progressively conflict to greater degrees with that of the area's inhabitants. The traffic surveys given in the EIS assume standardised growth rates in road use, which are likely to be significantly exceeded due to the exacerbated residential growth pressures in this part of Port Stephens LGA.

Also worth consideration is that there is no guarantee that Hanson will remain the owners for the full life of the proposal. There is significant risk that the site could be sold or transferred to another party, which has no record on environmental protection to uphold, nor any concern for the well-being of the surrounding communities. History shows that it is near impossible to hold anyone to account if multinational owners choose not to comply with the terms of their licence. Ultimately it will be the residents of the area who bear the brunt of any non-compliance, accidents, incidents, malpractice, or any other negative outcomes associated with the proposal.

12. FACTUAL ERRORS IN THE EIS

The EIS states that "*Concrete has very low embodied energy; this factor makes it a more sustainable product than many other building materials*" (P55), a statement which has to be regarded as utter nonsense. As the Earth Institute at Columbia University points out, the cement industry alone produces around 5% of total global CO_2 emissions and "*Producing a ton of cement requires 4.7 million BTU of energy, equivalent to about 400 pounds of coal, and generates nearly a ton of CO_2. Given its high emissions and critical importance to society, cement is an obvious place to look to reduce greenhouse gas emissions*". This makes concrete, in fact, one of the **least** sustainable building materialsavailable, even before the environmental effects of quarrying sand and aggregate are taken into account. If Hanson is unwilling to be honest concerning basic facts about one of their key products, then it casts any other statements made in the EIS into doubt.
Furthermore, the EIS is riddled with numerous small errors (such as Deadmans Creek incorrectly identified in one section as Barties Creek; Beresfield incorrectly identified as Beresford, and so forth). This is strongly suggestive of a "near enough is good enough" culture amongst Hanson employees and their contractors. Thus, the entire EIS status as a factual document should be regarded with extreme caution.

CONCLUSION

In summary, I wish to re-state my objection to the proposal in the strongest possible terms, principally on the grounds outlined above. I therefore urge the NSW Department of Planning & Environment totally **reject** the Hanson proposal, in the interest of both the environment and all members of the local community.

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