

Hanson manages the Calga Quarry (DA 94-4-2004) which it operates subject to the Terms of Approval which include **both** the 2005 Conditions of Consent (2005 Conditions) **and** the 2004/2005 Environmental Impact Statement (2004 EIS).

The existing Terms of Approval require that Hanson operates the quarry in accordance with the 2004 EIS. It is not sufficient that Hanson merely complies with the 2005 Conditions.

Although ownership has changed from Rocla to Hanson, there is continuity of experience in that Corkery, who represented Rocla from the outset, continues to represent Hanson.

According to the existing Terms of Approval: ***“The Applicant shall carry out the development in accordance with the (a) DA 94-4-2004; (b) EIS titled Environmental Impact Statement for the Proposed Calga Sand Quarry Extension, dated May 2004; (c) Amended Report titled Amendment to the Proposal Submitted as Development Application (DA 94-4-2004) for an Extension to the Calga Sand Quarry, dated June 2005; and (d) conditions of this development consent.”***

The application for amendment currently under consideration (2016 DA 94-4-2004 MOD 3) seeks an amendment that will substantially change the projected nature and future of the quarry from that described and approved in the 2004 EIS. In the 2016 Environmental Impact Statement (2016 EIS) it appears that Hanson is proposing a new direction for this quarry site. Doing what they propose to do seems to indicate a high probability that the whole operation, with the addition of an integrated rock crusher, is going to become significantly different to their operations to date.

The existing Terms of Approval will, therefore, be inadequate to deal with the proposed changes.

The prospective new operation requires full and proper consideration based on a full and proper environmental impact assessment. The 2016 EIS presented by Corkery on behalf of Hanson (the 2016 EIS) is quite inadequate for this purpose. The 2016 EIS implies an assumption that the Calga Quarry will operate in accordance with the existing Terms of Approval. It does not declare, let alone assess the environmental impact of, changes to the operation or to the future of the quarry that would likely result from the installation of an integrated rock crusher.

The 2004 EIS states *“Rocla intends to continue the current extraction and processing procedures for the life of the extended quarry”* and describes these extraction and processing procedures in detail as well as equipment to be used. The [then] current extraction and processing procedures did not include crushing, hard rock extraction in any significant quantities, excavating deep hard sandstone layers, or processing materials from other quarries except as ‘finishing’ for product extracted from the Calga Quarry.

It is not unreasonable, however, to draw a conclusion that Rocla saw as a long term option the eventual processing of hard rock, and this has been brought forward by Hanson after Rocla’s failure to gain approval to expand the quarry laterally.

Hanson has avoided discussion of how the significantly different operation in the future can be operated in accordance with the 2004 EIS and the terms of consent that flowed from it. The 2016 EIS is grossly inadequate in this respect.

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REHABILITATION

The 2016 EIS does not discuss rehabilitation in any meaningful way. This is despite the inclusion of the statement “The only [environmental] components where changes could occur relate to noise, visibility, air quality and the approach to rehabilitation.”

The 2016 EIS has not considered, given the likely changes to operations and environmental impacts, the probable life of the quarry and the implications for eventual restoration and long term use of the site. The existing Terms of Approval, as committed to by Rocla in the 2004 EIS, require the cells be revegetated with grasses and agricultural planting. What is more, the 2004 EIS requires that the cells be revegetated progressively following the sequencing of quarrying of each cell.

The 2004 EIS says “*Extraction would be undertaken in ten stages, namely Stages 3/1 to 3/6 and 4/1 to 4/4. This **sequential extraction**, presented in Figure D, **would allow the progressive development** of a series of silt cells **on completed stages** of the quarry **and their subsequent** consolidation, capping and **revegetation**. The numbering of Stages 3/1 to 4/4 is indicative of the proposed sequence but may be subject to change over the life of the quarry dependent on silt deposition and storage requirements.*”

From the 2016 EIS it can be concluded that the reason Rocla never did any meaningful rehabilitation of the capped ‘completed’ cells, despite being required to do so, is they wanted to keep their options open for reworking the cells. This does not negate the requirement that they plant progressively. Rocla has ignored this condition and the government has done nothing about it.

The new proposal in the 2016 EIS now appears to make the 2005 restoration provisions irrelevant.

Hanson cannot just ignore this. The EIS needs to address how this new proposal changes Hanson’s intentions for rehabilitation of the existing quarry.

The proposed new operations make the situation for rehabilitation far more serious than currently. With the existing operations it might be feasible to rehabilitate the cells as required by the existing Terms of Consent. However, if it is contemplated that Hanson might extract materials below the current floor levels of the ‘completed’ cells, then this is will no longer a quarry. It will be an open cut mine and a bloody great hole, the impacts of which have not been considered.

As an open cut mine, it is likely that it will only ever be ‘restorable’ as a garbage dump.

The existing restraints in the current Terms of Approval (unless you can rely on the general proposal outlined in the 2014 EIS much of which was flouted by Rocla with no consequence) do not rule this out.

The 2016 EIS states that the new crushing system will not disturb the perimeter slopes where rehabilitation steps have been taken. However, the EIS is silent on the rehabilitation of the capped silt cells which, according to the 2014 EIS should already have been rehabilitated with grasses and agricultural flora.

ADDITIONAL MATERIALS FROM THE CALGA QUARRY

The 2016 EIS does not explain from where the 1.8 million tonnes of product that Hanson says is still present in Stage 3 will be sourced. It is not reasonable that this quantity of material can be extracted from the remaining cells in Stage 3.

The following table shows that only a total of 2 million tonnes of product were removed from the quarry in the 10 years since DA 94-4-2004 was approved in 2005. Using existing processes and extraction methods, this was all the material extractable from all the completed cells plus the cell currently being worked.

2006	64,120 tonnes
2007	169,032 tonnes
2008	170,432 tonnes
2009	196,528 tonnes
2010	219,450 tonnes
2011	259,485 tonnes
2012	238,947 tonnes
2013	224,635 tonnes
2014	248,494 tonnes
2015	251,093 tonnes
TOTAL	2,042,216 tonnes

The volume of materials that Hanson claims remains in Stage 3 is approximately the same as that which was extracted from all completed cells, plus the cell currently being worked, over the 10 years. Even if, as Hanson claims, they can get 20% more product from extracted materials with the addition of a crusher, it is highly improbable that almost 50% of the quarry's materials remains in the last remaining Stage 3 cell.

Common sense dictates that, if as Hanson claims this material really is still in Stage 3, it must be anticipating new processes and extraction methods to exploit it.

Hanson should be required to address the specific details of the depths they might quarry to given the adding of a crusher and the new ability to process harder materials, which completed cells might be reopened, and how they intend managing water take from the aquifer at these levels and the potential impact water supplies for neighbours and for the environment.

ADDITIONAL MATERIALS FROM OTHER QUARRIES

The 2016 EIS refers to materials being brought in from other quarries, albeit obliquely, in its statement that “a crushing system

- 1) would improve the yield of the quarry products from the raw feeds by up to 20 per cent;
- 2) reduce bulldozer ripping time”;
- 3) as well as extending the quarry life.”

It is not possible to both process materials more efficiently (process faster), AND extend the life of the quarry (operate longer), unless more materials will be sourced than are anticipated in the current plan.

It is logical, therefore, to deduce from the 2016 EIS that additional materials will be sourced from other quarries.

The 2004 EIS did not envisage materials being brought in from other quarries (except to “finish” product extracted on site).

The 2016 EIS says nothing about whether materials might be brought in from other sources and, if so, from where; how much material will be brought in from other sources; what the environmental impacts will be of processing these additional materials; or what the traffic impacts will be.

PROCESSING CENTRE OR HYBRID PROCESSING AND EXTRACTION PLANT

The 2016 EIS does not rule out the Calga Quarry being used as a processing centre for other quarries.

This is a very significant issue.

The 2016 EIS proposes an emphasis on processing as a much more significant feature of the quarry site operations than just a simple production quarry, which is the nature of the current Calga Quarry.

The current 2016 EIS can reasonably be taken to imply an intention to develop the quarry as a processing plant, or hybrid processing and extraction plant, with much greater emphasis on processing than was ever contemplated in the 2004 proposal. Hanson completely avoids the issue of this important aspect of the proposal.

Operating at the 400,000 tonnes limit, which the 2016 EIS claims is likely, is far beyond what the quarry has ever processed as evidenced by the actual product volumes reported in the AEMRs since 2006.

The Calga Quarry, with the addition of the substantial new dimensions of large volume, and different, materials processing and handling arising from the extra materials and an integrated rock crusher, will have much greater capacity than was ever envisaged for this site in any of the Approvals to date.

This in itself implies a major change in direction for the Calga Sand Quarry.

NOISE

The EIS is quite unconvincing in its reasons for seeking an increase in allowable noise levels. This proposition should be specifically examined by the Department. It has to be concluded, in view of the lack of conviction in the EIS arguments, that Hanson is seeking a lifting of the limit on noise levels, contrary to anything else it might have said, because it is confident that the installation of an integrated rock crusher as part of the operations **will** result in a general increase in noise.

Common sense dictates that Hanson would expect a general increase in noise levels.

- Noise levels from the crusher would exceed those reported as measured when using the mobile crusher during the trial. This is because any crushing would have been of materials currently available, i.e. currently extractable, using the current processing methods.
- Hanson has also not reported any modelling of what noise levels are likely to be once they employ the new processes and extraction methods necessary to feed a crusher. These would include more ripping than currently; ripping of harder materials than currently; new machinery for removing harder materials; explosives use; on-site and offsite traffic moving the additional materials sourced on and off site, and increased product output.

EXPLOSIVES

Any plan to rework the hard rock of the existing quarry, whether in the remaining Cells in Stage 3 or reopening completed Cells, suggests the possibility of future explosives, a possibility that is not ruled out by the existing terms of consent.

Hanson should be required to address this issue.

DUST & AIR QUALITY

The 2016 EIS suggests that the 2009 PAE Holmes study “for the operation of the Southern Extension” dealt adequately with the question of air quality. However, the Holmes study only measured and modelled dust from a sand quarry with processing and extraction operations comparable to Calga Quarry’s existing operations. It did not anticipate deep mining, or the dust associated with a large processing plant which is likely to have more sand stockpiles.

When the Land and Environment Court was on site at the quarry, Corkery picked up a clump of sandstone, crushed it in his fingers, and explained to the Commissioners that what they saw was the softness of the materials that would be processed. Clearly the Southern Extension, and the Holmes Study, did not contemplate crushing hard materials that cannot be broken down by the current quarry techniques and equipment.

The 2016 EIS does not deal with dust in any meaningful way.

Rocla, assisted by Corkery, agreed that the measurement of PM2.5/4 is essential and even included this in their proposed Conditions of Consent should the Southern Extension have gone ahead.

Hanson should be required to show how they propose to deal with PM2.5/4 dust levels.

ABORIGINAL HERITAGE

Recognising that Hanson can prevent anyone visiting the site, we assume that Hanson will be a good citizen and, in the light of the conclusions reached by the Court in 20015, allow Aboriginal visitation to the Aboriginal sites in the adjoining area, including the Women’s Site situated very close to the existing operations.

It is astounding that, considering the very recent Land and Environment Court Case and the significance of the reasons given for the decision, that Hanson has elected not to consult with Aboriginal people about this amendment application, and that Corkery’s EIS makes no mention whatsoever of any possible impact on the Cultural Landscape, nor in particular on the Women’s Site.

Obvious omissions include any reference to the potential for noise, dust or vibration impacts on the Women’s Site. Consideration should be given not only to noise, dust or vibration from the crusher itself, but most importantly from the changes to processes and extraction including vastly increased production volumes.

Vibration impact on sandstone is potentially devastating, as evidenced by the impact of normal traffic on a well maintained road cracking “Whale Rock” which was supposed to be safe between the northbound and southbound traffic lanes of the M1 south of the Hawkesbury River.

Noise impacts on the “Women’s Site” are particularly important, especially in light of the recent Land and Environment Court case where the Commissioners themselves questioned Rocla’s Expert Witness on noise levels at the Women’s Site which had never been measured and which, considering the significance of the Women’s Site, should comply with noise limits for a teaching place or place of worship. It is not sufficient to measure noise from the current operation with the addition of a crusher. Noise levels arising from changes to operations that will come about as a result of new rock crushing capability must be measured and modelled.

Hanson should also deal with the potential for using explosives to access harder materials, and how this might affect the Women’s Site, with or without Aboriginal people accessing the site.

Hanson cannot rely on the current Terms of Approval on heritage matters as the 2004 EIS which forms part of this approval, did not consider that there were any Aboriginal sites of significance close to the quarry. They referred to sites within the quarry footprint that would be destroyed, and to other sites which they said they had looked for and not been able to find. In the light of the recent court case, Hanson and Corkery as its agent is well aware of what these sites are, where they are, their close proximity to the existing quarry, their significance, and the requirement to protect them.

CONSULTATION

Any claims Corkery has made that the 2016 EIS has involved extensive consultation **is a lie**. The so called consultation with Walkabout Park is illustrative of this. The "Consultation Matrix" in the 2016 EIS says of consultation with Walkabout Park:

"20 May, 24 May & 31 May, Rebecca called and emailed the park to offer contact details; advised Tassin was not available to speak but had got messages, no response to emails. 15/6/16 - Bianca visited reception and spoke with lady on front desk, Tassin was out. Gave her Rebecca's card as Hanson point of contact. 4/8 - Tassin was not onsite. Factsheet and letter was left at reception for her; Rebecca also offered to email a pdf version as per previous contact. Rebecca sent it same day."

It is worthwhile to briefly review ALL so called 'consultation' and other communications between Walkabout Park and Hanson.

NOT ON THE MATRIX In December 2015 prior to Hanson taking over the quarry, Tassin Barnard of Walkabout Park, at her instigation, met with Hanson's incoming CEO and the outgoing CEO who was going to be taking over Asia Pacific. The meeting was cordial. Hanson asked if, if they engaged with the local residents and Aboriginal community properly, they might be permitted to extend the quarry. This was surprising but it may have been that they had not actually read the Court Decision at that time. In response, Tassin invited them to visit Walkabout Park and physically experience the relationship between the two properties. The incoming CEO said that he would contact Tassin to make an appointment to visit Walkabout Park in February. He never did.

MATRIX In April 2016, the 2016 EIS Consultation Matrix says that someone called Rebecca emailed and/or visited Walkabout Park. A search of our Walkabout Park's email system reveals various emails in April and May 2015 with Hanson addressees "Slough, Paul (Calga) AUS" paul.slough@hanson.com.au, lisaandrews.IC@gmail.com, "Cox, Pip (Parramatta) AUS" pip.cox@hanson.com.au, "Driver, Andrew (Parramatta) AUS" Andrew.Driver@hanson.com.au, "Dolden, Chris (Parramatta) AUS" Chris.Dolden@hanson.com.au, "Bender, Shane (Parramatta) AUS" shane.bender@hanson.com.au. There is no "Rebecca" on the list. All emails were regarding the upcoming Calga Community Consultation Committee (CCCC) meeting. **None of these emails mentioned anything about an application to install a crusher.**

NOT ON THE MATRIX 7th June 2016, surprisingly NOT mentioned on the Consultation Matrix, was **the Calga Community Consultation Committee (CCCC) meeting** which was attended by Tassin Barnard of Walkabout Park. Minutes are on Hanson's website. One would have thought this was the perfect opportunity for a company intent on consultation to bring this to the community representatives' attention. The 2016 EIS Consultation Matrix suggests Hanson was consulting about the crusher since April. If this was the case then, surely, in June, it would be on the agenda of the CCCC meeting? **There was no mention about the installation of a crusher.**

NOT ON THE MATRIX In the meeting minutes of the CCCC meeting on 7th June 2016 it is minuted that **"Action: Tassin would like to have a coffee with Rebecca and discuss a few things. Tassin also invited Paul and Chris for coffee."**

MATRIX *"15/6/16 - Bianca visited reception and spoke with lady on front desk, Tassin was out. Gave her Rebecca's card as Hanson point of contact."* Presumably Bianca dropping off Rebecca's card was in response to Tassin's (minuted) offer at the CCCC meeting to have a relationship-building coffee with Rebecca. Having attended the CCCC meeting just days before so under the impression that she was fully informed on all current matters, there was no reason for Tassin to phone Hanson. **Bianca made no mention of a crusher.**

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CONSULTATION continued

MATRIX "4/8 - Tassin was not onsite. Factsheet and letter was left at reception for her; Rebecca also offered to email a pdf version as per previous contact. Rebecca sent it same day." This is the most bizarre claim of all of them as Tassin was there, and Paul Slough delivered the letter. Paul Slough visited Walkabout Park unannounced. **Tassin WAS present.** Paul handed Tassin the "factsheet and letter". They talked about the unpleasant weather. They shook hands and Paul left. **Paul did not mention that the page he was handing over included information about a crusher. Paul made no mention about a crusher.**

The "Letter" was stapled to a colour page which the Consultation Matrix calls a "Factsheet". There are copies of both in the 2016 EIS. **The covering letter makes no mention of a crusher.**

The "Factsheet" is actually a 2-sided colour A4 page with 100% of the front page, and 75% of the reverse page, promoting Hanson as a good corporate citizen with articles such as "Our professional drivers are world class", a list of "Did you know?" **facts** about how much material different types of construction require, underscored with the invitation "Contact us to take a tour of Calga Sand Quarry, we look forward to meeting you." **Tassin glanced at it. She concluded it was self-promotional material (junk mail) from Hanson. Not having had her attention drawn to it, either by Hanson's quarry manager, or by the content of the covering letter, she put it in the bin.**

These are the "Letter and Factsheet" referenced in the MATRIX as the only communication to other residents, and via Letterbox Drop NOT personal delivery to almost all of them.

This is what Hanson refers to as Community Consultation!

END

Note, because of inadequate time, this document has been typed but not proof read in order to meet the 12 September submission deadline.