

production rates

Acknowledgement of the Ancestors.

This meeting is supposed to be an opportunity for the community to be heard by the PAC. 26 objections were lodged. Today you have 6 people registered to present to you. Normal people cannot lose a day of pay to attend a meeting at 2:30 on a Thursday. This turn out is not representative of the community's concerns about this modification application.

We are not opposed to the quarry continuing to operate in accordance with its existing Conditions of Consent. However, we are opposed to any modifications that will make it possible for the quarry to do more environmental harm than it is allowed to do currently.

In 2013 the PAC approved the quarry extension. This decision was overturned by the Land and Environment Court. Yet again, the Planning Department is recommending that a Calga quarry application be approved, accepting the quarry owner's conclusions and not bothering to properly examine how these conclusions were reached.

To illustrate this, we have analysed Hanson's rationale. It is readily apparent that a reasonable person would not agree with Hanson's conclusions.

HANSON CLAIMS THEIR OPERATIONS WON'T CHANGE.

In Hanson's Response to Submissions much of their evidence, and even their own arguments, contradict their conclusions.

Throughout their Response to Submissions, Hanson demonstrates that their operations WILL change. Then they conclude that they won't.

Hanson is suggesting that as long as they don't exceed maxima stipulated in the Conditions, rock crushing won't change their operations.

However, Conditions of Consent are far more than a list of maximums that should not be exceeded. Conditions of Consent also specify what work may be performed, what equipment may be used, etc.

The 2004 Conditions of Consent prescribe what equipment Hanson is allowed to use. If the Planning Department in 2004 was staffed by intelligent and knowledgeable people doing their job properly, and I am sure they were, they would have considered that the quarry life, depth, traffic, noise, dust, aquifer interference and vibration would be limited by the limitations of the equipment that the Conditions of Consent permits.

To demonstrate whether or not adding new equipment with new capability will or will not change the way they operate, Hanson should be required to complete this table, with evidence. If Column 3 does not exceed Column 2, one can reasonably assume the rock crusher will not change the way they operate. If it does, then the way they operate will change in ways that we discuss later.

	Column 1	Column 2	Column 3
	Maximum stipulated in Conditions of Consent	Maximum achievable with equipment prescribed in Conditions of Consent	Maximum achievable with addition of rock crushing capability
Dust			
Noise			
Water take			
Vibration			
Traffic Movements			

HANSON IMPLIES THAT THE DEPTH OF QUARRYING WILL NOT INCREASE.

Hanson does NOT say that they won't dig deeper than the maximum depth that they can currently dig to. Hanson only says that they will not dig deeper than 190m ADH.

The imposition of an absolute maximum depth is a relatively ineffective safeguard against environmental harm. The more important safeguard, considering no-one knows how far the aquifer is below the surface or how deep it is until someone digs into and through it, is the limits in the Conditions of Consent to the equipment that may be used. Without a rock crusher, it is difficult for Hanson to destroy the impermeable and less permeable layers that keep the aquifer water perched.

The addition of rock crushing capability might not cause Hanson to exceed 190m ADH maximum depth, but it will enable them to exceed the maximums currently determined by the limitations of their equipment prescribed in their Conditions of Consent.

HANSON WILL INCREASE EXTRACTION FROM CELL 3/4 BY 360%

Rounding to the nearest 100,000 tons, Hanson took 2.0million tonnes from the quarry in 10 years. This was an average of 500,000 from each of cells 3/1, 3/2/a, 3/2b and 3/3.

They claim that with the rock crusher they can access another 1.8 million tonnes.

- They are not allowed to take materials from cell 3/5.
- They claim that they won't change their cell sequencing which appears to be a reassurance that they won't go back into the finished cells.
- They claim that they won't be a processing centre for other quarries.

This can only mean that, except for a small amount from their stockpiled materials, they will take 1.8 million tonnes from cell 3/4. This is a 360% increase. Even if you halve this, at 180% increase this far exceeds 10% increase from being able to crush harder materials .

As Hanson has ruled out other sources for the materials, they must be going to dig a very deep hole in the aquifer if they are going to get 1.8 million tonne out of one cell.

HANSON WILL TAKE MORE AQUIFER ROCK WHICH COULD TAKE MORE WATER

Currently, when Hanson reaches the point where they are removing material with too high a proportion of rock that is too hard to crush into sand with their equipment, they stop.

If their Conditions of Consent are modified to give them rock crushing capability, they will keep going deeper into the aquifer within the limits of their added rock crushing capability.

Hanson, in their Response to Submissions, states that they will go all the way down to the shale layer, taking them deeper into the functioning core of the aquifer.

They may still not exceed 190m ADH, but they will still be changing their operations to dig much deeper than they currently are able to do.

They will destroy more of the aquifer and take more water.

HANSON HAS NOT DEMONSTRATED THAT THEY WON'T EXCEED WATER LICENSE LIMITS

Hanson has never modelled water take with deeper excavation. They do not know how much more water they will take, so they cannot conclude that their water licenses are sufficient.

HANSON IMPLIES THEY WON'T INCREASE TRUCK TRAFFIC, BUT THEY WILL

Hanson does NOT say that they won't put more trucks on the road.

Hanson only says that they will not put more trucks on the road than is allowed by their Conditions of Consent.

As discussed under depth and water (above), the existing Conditions of Consent precludes rock crushing which restricts access to materials which limits output and, therefore, the need to move product by road.

Adding a rock crusher will increase traffic movements beyond current levels.

HANSON REQUESTS NOISE CRITERIA CHANGES

The paragraph in italics on page 5 suggests that Hanson is asking for their Conditions of Consent to be modified to change the noise criteria for each residence.

Noise impacts on neighbours was a complex issue before the LEC and was not finalised as this challenge was withdrawn before it was resolved.

As Hanson is claiming that the addition of a rock crusher will not increase their noise output, there is no basis whatsoever for a change in the noise levels in the Conditions of Consent.

If Hanson wants noise criteria changed, they should be required to complete the exercise begun in court to properly understand impacts on neighbours.

The concern is that, if Hanson wants noise criteria softened when they are claiming they won't make more noise and they are currently compliant, this puts into doubt whether they really believe the rock crusher won't make more noise.

HANSON IMPLIES THAT THE COURT WAS SATISFIED WITH EXISTING CONDITIONS OF CONSENT

Hanson states in their Response to Submissions that the LEC concluded that visual amenity, noise, acoustics, vibration, water, traffic and ecology could be resolved through Conditions of Consent.

This is not true. The LEC said that the Walkabout Park had reached agreement with the Minister and Rocla that they would withdraw contentions on these matters and try to work out Conditions of Consent to deal with them. It is in the public domain that Walkabout Park only withdrew these contentions as they could not afford to continue with them.

Hanson neglects to say that the LEC was not satisfied that TO THE EXTENT THAT THEY AFFECTED THE WOMEN'S SITE these issues could be resolved through Conditions of Consent.

Hanson has also neglected to state that the Conditions of Consent that were being considered by the LEC were vastly more stringent than their existing Conditions of Consent. Examples of what the LEC was considering were real-time monitoring of PM2.5 dust particles, continuous noise monitoring and replacement water for neighbours.

As the quarry was ultimately declined on the basis of Heritage, the LEC did not make a decision on what the final Conditions of Consent would have been.

SINCE LEC DECISION IN 2015, DUST MEASUREMENT HAS GREATER IMPORTANCE

Since the Holmes study in 2009

- The LEC has recognised the extraordinary heritage values of Calga.
- The LEC has recognised the importance of the Women's Site as a teaching site that should be accessible to Aboriginal women and girls.
- Although in the past when it was too hard to measure PM2.5 dust concentrations, these were estimated from PM10 concentrations, this was always known to be extremely unreliable.
- Measuring PM2.5 dust particles is now reliable, affordable and can feasibly be done in real time.
- Victoria and NSW Standards are now to measure and manage PM2.5 dust emissions.

If Hanson wants to install a rock crusher, they should be required to first do a local dust study measuring PM2.5, to measure the PM2.5 produced by a rock crusher crushing Calga rock, and only then should their application be considered.

WATER IMPACT

It is recorded in Hanson's community consultation meeting minutes and complaints register that neighbours are losing water. Because so many factors come into play, it is impossible to prove how much of a role the quarry has played in contributing to this. The court transcripts discuss these water impacts at length.

With the cumulative effects of changing operations with the introduction of a rock crushing capability, it is time that the Conditions of Consent were revised to safeguard neighbours. There needs to be a condition that requires that if Hanson, on the balance of probability, has contributed to a neighbour's water loss, they should have to replace that water either by sinking a bore, carting water to them, or otherwise compensating them so that they can replace their own water.

We note that in Hanson's last independent audit, Umweltdt highlights that the quarry had still not complied with the recommendations that they monitor and take remedial action on any impacts they may be having on groundwater dependent eco systems in the vicinity of the quarry. Considering that the changes in operations will result in greater water take (despite Hanson's claims to the contrary), this independent auditor requirement should be added to the Conditions of Consent.

HERITAGE IMPACT

A serious concern is impacts on the Aboriginal cultural landscape and, in particular, the Women's Site and the route that people must travel to reach the Women's Site which, according to the evidence provided by the quarry owners to the Land and Environment Court, follows the ridgeline from Peats Ridge Road along the southern edge of the quarry.

At this stage the access route is still not finalised.

Hanson implies that the LEC had no interest in visual amenity, noise, acoustics, vibration, water, traffic and ecology. This is not true. The LEC transcripts show that the Commissioners were extremely concerned about visual amenity, noise, acoustics, vibration, water and ecology and their impact on the Cultural Landscape.

We have already demonstrated that Hanson does not know how much water they will use when they start crushing rock. Water take impacts ecology. Ecology is the major part of the heritage landscape.

ABORIGINAL CONSULTATION

Hanson knows how important this place is to Aboriginal people, yet in their Response to Submissions, even though objectors raised this as an issue, they say that they dropped brochures in the local (all white) residents' letter boxes and that that is all they have to do.

As far as I am aware, there is an obligation to engage Aboriginal people if an application might affect Aboriginal heritage. I understand Hanson claims that it won't, but I have shown that it will.

THE WIDER CULTURAL LANDSCAPE

Hanson implies that the LEC was only concerned about the Women's Site. However, reading of the transcripts and of the actual decision shows that the LEC had equal concern for sites that have yet to be found throughout the landscape immediately adjacent to the quarry. What is more, the LEC was concerned that there may be undiscovered sites of equal, if not greater, cultural value than the Women's Site in the area.

HANSON HAS NO BASIS TO CONCLUDE THAT VIBRATION WON'T DAMAGE THE WOMEN'S SITE

Hanson claims that there is no evidence that they can draw on of how vibration might affect an Aboriginal carving on a sandstone platform.

Hanson has neglected to mention the effects of traffic vibration on Whale Rock, despite the fact that Corkery is well aware of this as he was sitting in the Land and Environment Court when this evidence was presented (this was in open court and not during any of the closed Women's Business).

Hanson has based their claim that vibration won't damage the Women's Site on modelling of how vibration affects buried pipes.

The Minister and Rocla both presented this same 'buried pipes' argument to the Land and Environment Court on a number of different occasions including when evidence and photographs were presented about the fact that Whale Rock in the middle of the M1 has split in two. The arguments about buried pipes did not appear to convince the Commissioners that the Women's Site would be safe from vibration induced harm.

Pipes are engineered to withstand vibration. Their cylindrical shape and reinforced materials and flange fittings are all essential to their longevity. Pipes are buried so that they are encased in earth so that the packed earth against the cylindrical shape will absorb and nullify vibration.

The Women's Site is on an exposed sandstone platform. It has natural flaws, crevices and weaknesses. It is not encased in earth or any other vibration absorbing substance. It is not cylindrical. It is not engineered to withstand vibration.

Clearly, the carving on a sandstone platform is much more fragile and susceptible to vibration damage than a buried pipe.

Without proof from Hanson that the proper vibration studies have been done and they prove the Women's Site won't be damaged, the risk to the site is too great and the Precautionary Principle should be applied, requiring that Hanson should prove that they will do no harm.

IN CONCLUSION

Despite Corkery's conclusions to the contrary, all the evidence Hanson has supplied shows that adding rock crushing capability will change the way Hanson operates. It will give them access to materials that they cannot access, or it is not commercially feasible for them to access, right now. They might still operate within existing conditions of consent determining production limits, operating times, but after the modification they will be do environmental harm that is impossible right now.