

MARTINS CREEK QUARRY EXPANSION SSD 14-6612

I object to the project as described in the EIS.

Below are my comments and queries regarding this proposal and the current quarry operations.

EIS MAIN REPORT

Pg 38 "Internal haul road design

All internal haul roads are designed to have a maximum grade of 1:8, with frequently used routes design at a grade of 1:10. The internal roadways are dressed with quarry scalps and other products from the crushing activities.

To minimise noise impacts on the surrounding environment, all haul roads will be kept trimmed."

Are these haul roads watered to suppress dust emissions?

Where is the water currently sourced for dust suppression?

Pg 119 "The Blast Report considers data from monitoring stations at the Patterson Valley Estate, the Gully residence monitor at 336 Dungog Road, and a station at the back gate of the quarry which is considered to provide the best indication of how the residences at Station Street are likely to be affected by blast induced ground vibration given that this is the closest monitor and is the direction of Station Street from the Quarry."

Given that the back gate monitor doesn't trigger for approx. 50% of blasts, what trigger levels are set?



BLASTING & VIBRATION REPORT

"This report has blasting listed as between 9-5 Monday to Saturday."

"EIS pg 52 Blasting at the quarry is proposed to remain at the levels regulated under the existing EPL".

The current EPL is blasting between the hours of 9-3 Monday to Friday.

Pg 20.

"The basis for coupling the geophone is to ensure that it faithfully records the actual motion of the ground and the preferred coupling method depends on the site conditions. Where there is a rigid surface i.e. concrete or rock suitable adhesive cement like plastibond can be used. Where the surface is soil vibrations can only be accurately measured using a buried mount such as a concrete block that is a 200mm concrete cube or a squat cylinder having a length equal to the diameter of 200mm. The concrete mount should be placed in a hole that is excavated about twice the size as the mount i.e. 400mm by 400mm by about 300mm deep so the top of the geophone when mounted on the block is just below ground surface. The block can have mounting bolts and a baseplate on its top to enable the geophone to be securely attached to the block if the measuring location is a permanent one. The block is placed in the excavated hole that has a level floor and some of the excavated soil placed around the side of the block about 40mm deep. This loose soil is then carefully compacted to ensure that the block is firmly in place with this process being repeated a number of times until the tamped soil is level with the top of the block thereby firmly anchoring the block to the remainder of the soil. The geophone must either be cemented or the mounting bolts and plate must be oriented so the geophone is facing towards the blast locations."

Has the author of this report conveyed his opinion on geophone coupling to Daracon and the present blasting contractor, if not, why not?

Since Daracon leased the quarry we have had 104 blasts, so residents are quite capable of assessing what is acceptable at their residence.

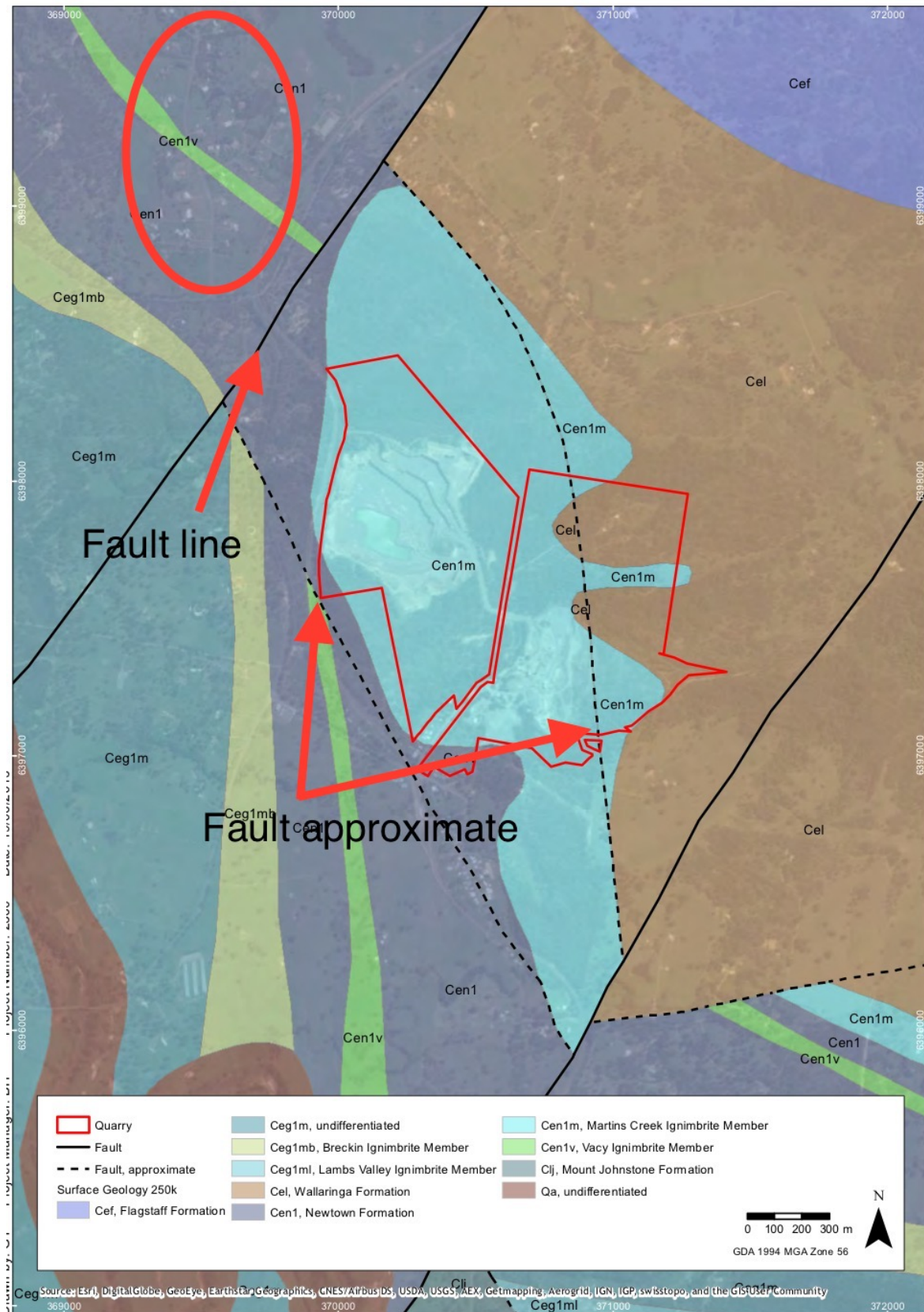
What area (radius) around the blast monitor is the blast result relevant to?

The blast result for Paterson Valley Estate on 21/10/16 reported PPV 1.75, Overpressure 94.9 is not credible.

Blast results for 4/5/15 list PPV for all 3 monitors as .89, is that correct?

If the bubble is not within the black circle of the geophone what effect does that have on the reading? (Texcel GTM blast monitor)

Since Paterson Valley Estate (marked on map) is on 2 different strata Vacy Ignimbrite(Cln) and Newtown Volcanics (Cln) to the quarry, what method of coupling of the geophone does the author think appropriate?



Surface Geology and Structures of the subject area
Martins Creek Quarry - Aboriginal Cultural Heritage Assessment

FIGURE 4

It is my understanding that Vacy Ignimbrite (Cen 1v on this map) is a thin band of rock 12-16 metres thickness.

What affect do the fault lines have on ground vibration, in particular when blasting on bench 4?

ACOUSTIC REPORT

Pg 12 "Figure 1 shows an extract from the LEP zoning maps and shows that the surrounding area is largely zoned RU1 Primary Production with the township of Martins Creek zoned Village (RU5)."

It is my understanding that Paterson Valley Estate is zoned R5 Large Lot Residential.

Pg 27 The image of the quarry (Fig 4) does not appear to be a recent image.

What year was this photo taken?

GEOLOGICAL ASSESSMENT PT 1

The calculated volume of Latite is 14.1 million cubic metres or 38.07 million tonnes. (pg 13)

I received an email in 2012 containing the minutes of the Community Reference Group meeting held 30 November 2007 (before the Daracon lease) it is noted that **"In the case of the Martins Creek Quarry, it is estimated that reserves are approximately 26 Million tonnes, although approximately 4 million tonnes may be unable to be extracted due to constraints on the site"**

Why are the estimations so different?

GEOLOGY AND BLAST VIBRATION REPORT

This report is a draft, it appears to be incomplete, so I question why it was submitted?

Pg 37 EIS Statement

"Extraction Process

Quarry preparation

Any new quarry areas will be stripped of all vegetation prior to removal of the topsoil. The topsoil is present to a depth of approximately 0.5m. It is anticipated that another 1.0m and 2.0m of deleterious weather rock, clay and earth will need to be removed to expose the Andesite rock below."

I question why surface rocks were collected from residences at Paterson Valley Estate, it is noted that between 1-2 metres of rock, clay and earth need to be removed to expose the Andesite rock within the quarry boundary.

Would have assumed there would be a table listing the predicted PPV and overpressure for residential locations for each of the proposed extraction areas.

"EPA requirements(SEARS) Pg. 4 lists

*– Ownership details of any residence and/or likely to be affected by the proposed facility;
Maps/diagrams showing the location of residences and properties likely to be affected and other industrial developments, conservation areas, wetlands, etc in the locality that may be affected by the facility."*

No ownership details listed for affected residences.

Please provide laboratory report that confirms clay sample has a moderate to high potential to cracking when dry, or a statement from Qualtest.

MARTINS CREEK QUARRY BUSINESS AND EXTRACTION REPORT

2.5.1.2 Drilling and Blasting

Pg 11

"Drill and Blast activities are undertaken using a hydraulic drill rig to drill the blast pattern. The Peter Bellairs report identified a typical blast pattern used at Martins Creek Quarry as 89 millimetre diameter holes with a 500mm sub-drill on a 2.8 m (Burden) and 3.2 metre (Spacing) grid layout, with a typical powder factor of approximately 0.6 to 0.65. Further the report identifies that as the quarry develops the blast design will require modification depending on relative impacts to sensitive receivers, as is the case currently at Martins Creek Quarry. Drilling and blasting is conducted using experienced drill and blast contractors using late model, hydraulically driven drilling rigs. They utilise contemporary bulk explosives pumped directly from delivery vehicles. There will be nominally 5 blasts per month."

Are those relative impacts to sensitive receivers going to be identified before blasting or only after the complaints are received?

MARTINS CREEK QUARRY CCC MEETING FEBRUARY 2015

Extract from MCGCCC Meeting February 2015
Precision Drill & Blast.

Techniques/ Factors

- To ensure our compliance to license conditions
- To produce well fragmented rock for our client to process safely and efficiently
- Eg poor result = rock hammers, hang ups
 - Re-orientation
- of old quarry faces
- Taken 2 years and still going
- Direct away from View st & vacy
- In doing this some blasts orientation
- have not been favourable vibration or overpressure risk
- Design –
- Location 5 levels each different geology
- Product being made

Wrap Up

- Our aim is to as far as we can control the blast induced disturbance to a minimum
- Combined with our site knowledge and blasting experience throughout our other quarries and technical construction work, we are using the latest techniques and also developing new techniques to achieve the best for our client and their neighbours.
- Our reputation is also at stake every blast we conduct
- This is why the license and AUS STANDARD allows for a small number of low level exceedences in all quarries
- We can control a big part of our process but there are some variances in geology and climatic conditions that change quickly.

Questions regarding the above extract

Doesn't directing the faces away from View St & Vacy just move the impact onto another location?

What are the 5 levels each different geology?

What are the variances in geology?

STAKEHOLDER CONSULTATION ISSUES REPORT

PG50

Project Issues

Property Values

Proponent's Response

It is considered that this is not relevant as Martins Creek Quarry has been an operating quarry for 100 years

Could Daracon provide a reasonable response to this issue?

AIR QUALITY IMPACT ASSESSMENT

Residents in the Paterson Valley Estate don't know what the dust deposition is here as the EPA have never listed this area as a position for dust monitoring.

Given that the quarry is more to the north than the Dust Deposition Monitor on Dungog Rd I consider this inadequate, given that blasting and crushing are undertaken in Lot 6.

Can Daracon provide a Material Safety Data Sheet for Martins Creek Latite Tuff?

SOCIAL AND ECONOMIC ASSESSMENT

6.3 HEALTH

No mention of health impacts on the community related to this quarry.

I have included the following extract from Extractive industries quarries EIS guideline 1996 as it is listed on NSW Planning and listed as updated on 21/7/2015.

"11. Social and health issues

For extractive industries located to result in potential impacts on residential communities, the following issues should be considered:

- a) social impacts as a result of changes in employment patterns
- b) social impacts resulting from changes in the amenity of the area
- c) impacts on the health of the community from any potential changes in the air quality, noise and vibration regime and safety on the roads"

GOSTWYCK BRIDGE

Gostwyck Bridge has been undergoing maintenance since 2012 and is still not finished.

Given that this bridge is one lane and has significant site issues on the northern side how can it be considered acceptable for the amount of trucks proposed.

I have seen no document in the EIS or attachments from the RMS to confirm that this bridge is adequate for the proposed haulage.

Trucks going to and from the quarry announce their approach to this bridge over CB radio.



TRAFFIC IMPACT ASSESSMENT

No assessment for Paterson Rd/Duns Creek Rd and Duns Creek Rd/Butterwick Rd intersections.

Paterson Post Office corner is not ideal for large vehicles, but we don't have 40 milk tankers or chicken trucks turning this corner hourly either.

Insufficient detail on new access option for Dungog Rd, my concerns are speed limit, sight distances for vehicles on Dungog Rd, early morning queuing.

CONCLUSION

If an EIS had been undertaken before the EPA increased the licence in 2007 would this quarry have a legacy noise issue or any of the issues currently experienced?

Whose land provides a buffer zone?

What is an acceptable buffer zone for a hard rock quarry?

What is an acceptable blast exclusion zone for fly rock?

Can Daracon give a reason why there has been a quarry related vehicle on the rail access road for the blasting undertaken on 21/10/16 and 17/11/16?

When the quarry is contacted by the EPA or directly by residents over blasting complaints is there documentation regarding what bench and the location on that bench that was blasted in relation to the complaint, and if so can Daracon provide this information?

Can Daracon provide blast monitor printout for 21/10/16 and calibration certificate for the monitor?

How many residents presently have a negotiated agreement with the quarry, and if any residents do have an agreement what are the terms?

The problem I see with negotiated agreements are that if a resident accepts higher noise, blasting impacts that just moves the issue onto the next most affected resident.

The National Pollution Inventory report for this quarry has employees for 2014/15 as 12.

The above report also lists Dust Suppression-water sprays/chemical suppression

-wind breaks/covered/enclosed stockpiles

Can the proponent detail where the covered/enclosed stockpiles are located?

What measures are in place at the quarry to ensure that loaded trucks will not be dropping aggregate from their tailgates onto public roads?

This quarry is currently listed on EPA Licence as "Current Environmental Risk Level – Level 2."

I ask that the Department of Planning reject this project due to the constraints of the site and the transport issues.

Jennifer Carroll
58 View Street
VACY