

TABLED AT HEARING

Application: Road Metals
- joint hearing
Date: 4 April 2018

Derek & Jess Vallance - 105 Old West Coast Road, RD6, Christchurch, 7676

Reference- Road Metals Company Limited Quarry Expansion

Environment Canterbury Application- CRC181274

Christchurch City Council Application- RMA/2017/211

We Oppose application - CRC181274 and RMA/2107/2111

Our reasons for wanting both applications denied are below;

This proposal is a non – complying activity under the Christchurch district plan and should be treated as such.

Firstly can I please state that the applicant in a number of evidential documents advises that this application is a discretionary activity under the Christchurch District Plan following the rule 17.5.1.4 Discretionary activities (D3) – In the Rural Urban Fringe Zone quarrying activity located more than 250m from a residential or school zone is a discretionary activity. The applicant also refers to and quotes rules and regulations that relate to the Rural Quarry Zones in support of his application. Let's just reiterate that this application is for a site located in the Rural Urban Fringe Zone according to Christchurch City Council and is NOT zoned as a Rural Quarry Zone, therefore any rules or regulations referring to Rural Quarry Zones need to be removed and the application re assessed and properly submitted using the correct terminology.

As this application is solely referring to quarrying activity being carried out on a location designated Rural Urban Fringe the Christchurch District plan has some rules of its own. Rule 17.3 How to interpret Rules and Rule 17.5 Rural urban Fringe Zone. Proposed extraction of materials is located on Rural Urban Fringe Zoned land located at 518, 619 and 635 Buchanans Road, the plan provides for a number of permitted activities. (Quarrying is not one of them) Rule 17.5.1.1 Quarrying under rule 17.5.1.3 is also not listed as a restricted activity. Rule 17.5.1.4 (D3) lists quarrying activity located 250m or more from a residential zone or specific purpose (school zone boundary) as a discretionary activity.

However the applicant Road Metals proposes to Quarry less than 250m from a residential zone which has 9 affected properties all located in the Christchurch City Councils Rural Urban fringe Zone NOT in a Rural Quarry Zone. These are listed below on the next page;

R1	Whiteside and Wenmouth	10m
R2	Bealey Trustee	215m
R3	Prain	165m
R4	Crewes	150m
R5	Vallance	125m * FROM BOUNDARY APPROX 15m
R6	Avonside Holdings	50
R7	Pryce and Beswick	215m
R8	Rimu Park	200
R9	Martin, Wilson and Chapman	215m

Then according to the Christchurch City Plan under rule 17.5.1.5 this is a NON – Complying Activity (NC2)

Quarrying Activity located less than 250m from a residential zone.

I also note that according to a publicly notified Council document Section 32 Report from 2nd May 2015 that the Christchurch City Council states in a “rural urban fringe zone providing for quarrying activity located 250m or more from a residential zone boundary as discretionary activity and NON COMPLYING for any quarrying activity within 250m” The Christchurch District Council also states on Page 9 Section 5a ii f “quarrying Activity located within in 250m of a residential zone boundary if excavation is within one metre of the seasonal high water table as a NON – Complying Activity with Public Notification Requirements.

The above statement further reiterates why this whole proposal and all its expert witness statements should never have reached this stage in what seems like a very flawed process. Christchurch City Council and ECAN need to stand up and take notice of what is right for the health and wellbeing of its Rural Urban Fringe Zone residents.

Refer to Victoria Guidelines for recommended separation distances from sensitive receptors for industrial residual air emissions.

This was in fact reinforced on ECAN’s own website on the 16th March this year;

(www.ecan.govt.nz/get-involved/news-and-events/2018/notification-of-quarry-consents/)

Notification of quarry consents step one- is to identify sensitive receptors that might be potentially impacted by dust discharge. In rural areas around quarries, a sensitive receptor includes a residential dwelling, including the garden or curtilage (because that is effectively part of the house in terms of people’s use of their property) *

Under ECAN’s heading on the same document titled – what guidelines do you use to assess the effects of quarry dust? “in the absence of New Zealand specific guidelines, Environment Canterbury applies

the Environmental Protection Authority (EPA) Victoria guidelines for recommended separation distances from sensitive receptors for residual air emissions. EPA guidelines clearly state the separation distance should be 500m. Given the EPA's recommended 500m separation applies where there are significant emissions of Respirable Crystalline Silica (RCS) Crystalline Silica is a naturally occurring component in Greywacke. ECAN however under advice from independent experts typically applies a 250 m separation distance where only extraction and trucking of native material occurs. So to recap: ECAN in their own words use the EPA as their guide and the EPA recommends a separation distance of 500m. ECAN says that distance should be 250m. THE APPLICANT IS PROPOSING 100M OR LESS TO SENSITIVE RECEPTORS.

This application therefore according to the Christchurch City District Plan should be declined as a NON-Complying Activity and unless it is refused it should be publicly notified as per rule 17.5.1.5

Noise Pollution

In general terms both the applicant and the city council state that trees bushes and earth bunds will dampen noise coming from the quarry when constructed properly. I accept this to be partially correct. Marshall Day state quite wrongly that there will be no significant increase in noise levels to neighbours. Hypothetically, or as a matter of fact, on the opposite side of the bund ie. The side that is parallel to Buchannan's road with all the traffic on it this large earth bund etc will have the opposite effect. It will push any noise that used to dissipate through trees and across open fields back to the properties opposite the road. Therefore increasing noise levels and disturbance to the closest properties (of which I am one of them). We are already disturbed by heavy trucks very early in the morning heading to the quarries to fill up in the mornings. This traffic will increase due to more production capabilities from Road Metals. Murray Francis states that there will be no increase as traffic uses West Coast Road. This is not entirely true as Faulks Construction has a direct Haul Road which links the rear of his yard on Buchanan's Road to the existing Road Metals site. As production on Road Metals increases or continues Faulks will not use the Main Entrance he will simply bring more of his trucks out through the Buchanan's road entrance which has now been widened to allow for this increase.

The existing Road metals site when expired of aggregate will be rehabilitated and would result in a traffic decrease in the area. These quarries should not be given an infinite lifespan as this was not the intention when they were originally granted extraction rights.

Original submission

Applicant states there will be up to 20 movements per hour (what does the applicant class as a movement-this statement is rather ambiguous) for example if movement relates to trucks, then 20 trucks an hour equates to one truck every 3 minutes or 220 per day.

This is a substantial increase in movements that will be in closer in proximity to neighboring properties than what is happening presently.

Noise level monitoring carried out by Marshall Day Acoustics on 28th July 2013 refers to traffic noise being more prevalent and disturbing. This might well be the case if this application is approved due to the huge increase in Heavy Truck traffic that will be coming and going from the Quarry. Although the entry and exit point is located on Miners Road to get to Miners Road most of the quarry traffic will either use Old West Coast Road or Buchanan's Road. (this should have read although the entry and exit point is located off Miners Road to get through Miners Road most of the quarry traffic will either use Old West Coast Road or Buchanan's Road) This is what happens now with the traffic. So concerns with increased heavy traffic and safety should also be looked into and not simply dismissed because the Entry point to the quarry is on a different road.

Extra Heavy traffic going up and down both Buchanan's Road and Old West Coast Road pose a significant additional risk to families living on both these "Rural" Roads.

Marshall Day Acoustics state "that in conclusion predicted noise levels from proposed activity are acceptable and adverse noise effects will be minimal"

Predicted noise levels are just that they are a prediction that can be manipulated to get the best effect. Any substantial increase in noise levels should be unacceptable and as this will have negative adverse effects on residents not only in the quarry area but from neighbourhoods that the heavy trucks pass through to get out of town.

Marshall Day Acoustics also state "that there is no significant adverse noise effects on adjoining neighbours"

Presumably and most probably that is due to the location of the existing quarry being that much further away than what is being proposed. Currently we live more than 250 meters from the quarry face and we are also currently not listening to an additional 220 movements in very close proximity to our house. If we were listening to this and living within 250 meters then I suspect that we would have made numerous noise complaints.

Further to this the data used by Marshall Day for noise level comparisons coming from the quarry was carried out in 2013. This report states "during our noise survey a loader was extracting material from a pit 10 meters below existing ground level" Surely an up to date and current test should be carried out at ground level to show a truer and more accurate indication of what noise levels would be whilst the quarry is in its early stages. After all I am sure it won't get to be 10 meters deep overnight.

With up to 20 additional movements an hour or one movement every 3 minutes from heavy diesel machinery then that would suggest a substantial impact on neighbours from the additional noise and a major disturbance to the Rural Community.

Presently the crusher starts around 7am in the morning which we also note was a time Marshall Day Acoustics has deliberately kept away from during its noise testing. This noise will only increase as more aggregate is quarried.

Lastly what was the reason all Marshall Day Acoustic testing was done around the 3pm to 3.30 time frame? Could it be that this is a traditional quiet time due to afternoon breaks for the workers.

In Conclusion this application should be denied. The Noise pollution figures will be substantially higher than what has been claimed. The client themselves state that when they say up to 20 movements an

hour increase from the present workings or an additional movement every 3 minutes. That is a very significant increase to both noise pollution and also to the amount of noxious gases released in the area.

- **Pollution**

Pollution can be interpreted in a variety of forms. Large quarries in a Rural Urban Fringe area that degrade the natural or physical qualities and characteristics of that area and don't contribute to peoples appreciation of its pleasantness, aesthetic coherence and recreational attributes can be considered as a pollutant. Dust, Noise, Heavy Equipment and Trucks on Roads all carry their own source of pollutant (all of the aforementioned are associated pollutants that are directly associated with Quarrying operations). Dust can be borne from extraction equipment on the quarry face or from trucks moving on site. Although measures can be initiated to somewhat diminish the effects of dust they cannot stop its occurrence. Dust is created on site and transported off site with either wind or machinery it cannot be controlled completely. Noise from quarrying activities generally diminishes the feel good factor that should be a given for people who reside in or near an urban fringe area, after all no one moves out of a noisy city to be closer to even more noise pollution! Noise pollution from truck engine braking, rock crushers or from general quarrying activities are not something that the city district plan directly refers to, it does however refer to "cumulative effect" Singularly the effects of this proposal when considered in isolation may well appear of no great consequence. The primary issue for determination is whether the cumulative effects of the proposal and the pollutants it brings to the area are going to have a negative or positive effect on the wellbeing of the residents.

(I would hazard a guess as to a very distinctive lack of positives)

Does movements mean trucks? then an additional 20 movements an hour or 1 movement every 3 minutes. A substantial increase over existing quarry works and also a substantially closer to neighbours than existing quarry works.

As stated by the applicant "no stockpiling will occur" So this means that everything that is quarried will be transported immediately to the existing Road Metals Quarry. This movement will be over unsealed roads using heavy and large dump trucks. These dump trucks cause excessive dust each time they move and due to the weight on them they crush everything under their tyres. So not only will there be an elevated level of dust from the quarrying operation there will also be a much larger problem of dust on the internal roads created by the crushing of gravel when its driven over. This dust nuisance will get exponentially higher the more times these internal unsealed roads are driven on.

Yet with this increased dust nuisance the applicant only proposes to monitor the situation twice daily and assess for visible dust. Dust is created constantly! Some of this created dust ie Crystalline Silica is invisible to the naked eye. This Crystalline Silica cannot be monitored by a human as it cannot be seen

by a human, therefore this method of assessing dust nuisance will be very ineffective and probably just a box ticking exercise with little or no value to the community or indeed the quarry workers safety.

The applicant says that if visible dust blows from site, operations will cease till this dust has been controlled – this is a reactive measure to a problem that should have a clear proactive solution to keep all dust levels away from quarry boundaries.

The applicant references The Ministry of Environments Good Practice for assessing and managing dust and also The Greater London Authority (2006) Guide. The latter being out of date and is now superseded with a 2014 report (this 2014 report uses more controlled and stringent data).

The Health and Safety Executive 2011 research report (RR878) discusses levels of respirable dust and respirable Crystalline Silica on Construction sites. This report states that air quality values of PM_{10} of $50\mu g-m^{-3}$ were often exceeded on large scale construction sites.

The report also states “despite dust controls, large scale demolition projects, with excavators, have the potential to produce air concentrations of respirable dust in excess of $50\mu g-m^{-3}$ (maximum of $226\mu g-m^{-3}$)

This is probably because the contractors find it difficult to introduce effective and consistent dust control because of the scale of the task.”

Greater London Authority (2014) Dust Control states “construction and demolition activities can result in the following air quality impacts;

- Visible dust plumes
- Elevated PM_{10} and $PM_{2.5}$ concentrations and
- Increased concentrations of Nitrogen Dioxide

Air quality matters! Air pollution not only harms the environment but also our Health and Wellbeing. Poor air quality can cause serious health problems (respiratory and cardio vascular conditions) and therefore reduce quality of life for all.

In 2012 the World Health Organisation (WHO) confirmed that fumes from diesel engines are carcinogenic. Its research determines that exposure can cause lung cancer and possibly tumours to the bladder.

You can only imagine how much more additional pollution to our air quality 220 movements a day will contribute.

Has The Canterbury Air Regional Plan been forgotten about in this application?

Furthermore – What happens when dust settles? We currently experience difficulties with dust on our property, having this quarry at close quarters will exponentially increase the dust accumulation on our home and land. Dust does contaminate the air and our land and it can also affect the wellbeing of any grazing animals on our property.

In Conclusion – this application should be denied. There are no ifs or buts in this scenario. Pollution will increase substantially if this project were to get the go ahead. Neighbours in close proximity will have their health undermined due to uncontrolled pollution from the project. These pollutants include dust, Crystalline Silica, Carbon Dioxide and Nitrogen to name but a few of the carcinogenics. There are no

satisfactory measures that can guarantee this project will not pollute the local neighbourhood and affect the lifespan and wellbeing of its population.

- **Water Pollution and Water Table Height**

As the water table in this area provides drinking water for all families residing in the area through the use of wells and is also part of the water table connected to where Christchurch city draws its water from pollution of this world class drinking water is a major concern. It should also be noted that presumably any water used for dampening down or dust suppression will also be drawn from the water table. When cleanfill is used to backfill quarried areas there is unfortunately no 100% guarantee that this so called cleanfill will contain no pollutants that could leach into the water table over a period of time. Also based on a report by Twelfth Knight Consulting, Aggregates: demands and resources prepared for the City Council the peak demand bubble for construction aggregate should have burst by April 2018 and reverted to business as usual. This in turn will limit the flow back to the quarry of good cleanfill as the demolition of buildings nears completion. This in turn could lead to contaminated fill being used to fill up the excavated holes. As already mentioned by Victor Mthamo in his statement of evidence on behalf of Road Metals once rehabilitated the quarried land would not be suitable for cattle due presumably to the lack of filtering material and the shallow depth of soil. This brings me back to my original concern with water table pollution, as the natural filtering qualities of the land have been stripped and the land has been backfilled with anything suitable to fill a hole in the ground what leads you to believe there will be no pollution to the water now or in the future. Also what will stop future land owners grazing cattle or other animals when at present that is what the land is used for. Concerns should also be noted here that pollution could already be happening to the water table and surrounding land as it seems very few quarries in the area including Road Metals are actually undertaking the rehabilitation of the land seriously. (google maps clearly shows the extent of this underdevelopment and lack of rehabilitation. Included in this is the so called rehabilitated site that has been done by Road Metals) yes it is green and covered in grass no its not been rehabilitated as it has sheds and machinery currently sitting all over the site.(as seen on google maps)

There are major concerns regarding pollution to the water table (we all use well water in this area so pollution of the water table is a great concern) If the water table gets polluted it is unfixable, ie the water table would be permanently polluted and the consequences would last for many many years.

We have already had a major quarry excavate below the legal allowed depth and into the water table casing concerns from both the Council and Locals alike.

Much discussion revolves around the depth to which this applicant can excavate keeping 1 meter above the water level.

Has any consideration been given to the effect that the Central Plains Water Irrigation Scheme will have on this area?

The Ministry for Primary Industries states that the Water Table is increasing in height annually due to the effects of the Central plains Water Limited's Irrigation Scheme. They also say that as more farmers stop using well water this increase in height of the water table could quicken.

So how can we approve an application that is relying on water table data from now that could be dramatically different in a few months' time.

As we are all aware Quarries although they are self-monitoring the main focus is on digging out aggregate it is not on protecting the environment.

- Who monitors the increasing water levels?
- Who monitors the ground water quality?
- Who monitors the "clean landfill that is backfilling the quarry pits"?

Pollution of the land could come from any backfill source; like oil tainted wood, asbestos contaminated soil, oil, paint, there are a magnitude of pollutants that could be overlooked through self-monitoring.

Contamination can take tens or hundreds of years to either repair or to be found.

Monitoring is all good but once a contamination takes place it is not a quick process to fix it if it can be contained at all. Other quarries in the area have repeatedly excavated below waterlines and nothing can or will prevent this from happening in the future.

If there is an issue with;

- Air quality
- Water Contamination
- Ill Health
- Respiratory illness
- Cancer
- Sleep Related Illness
- Lung Disease
- Etc.

Who will ultimately be responsible for the Health and Wellbeing of the quarries neighbours? Many of whom originally moved to this rural area for a better standard of living.

Everyone who moved here after the quarries were operational also knew the quarries had a limited lifespan that original lifespan is almost up.

Locals certainly did not move here to be exploited by quarry operators or have their Health and Wellbeing put at risk by large cash rich corporations.

In conclusion this application should be denied. Reasons for denial are that no one who works for the council, environment Canterbury or any of the quarry operators can 100% guarantee that there will be no water table breach, no water table pollution, no polluted backfill, and that there will be no long term Health risks to the local community.

We Derek Richard David Vallance and Jessica Morag Vallance

Of: 105 Old West Coast Road, RD6, Christchurch, 7676

Have submitted this response to the application lodged by Road Metals Holdings Limited

Total 8 pages in opposition to the resource consent form.

Application to Environment Canterbury for resource consent: CRC1811274

Application to Christchurch City Council for resource consent: RMA/2017/2111

Let it be known that we oppose both applications and wish both applications to be denied.

I/we wish to be heard in support of our submission.

Dated: 04 - April - 2018