

TABLED AT HEARING

Application: Road Metals

Joint hearing

Date: 5 April 2018

Submission of:

Craig & Annell McDonagh

175 Old West Coast Road

Christchurch

Opposing:

Road Metals Company Limited

Record Numbers:

CRC182174 and RMA/2017/2111

175 Old West Coast Rd

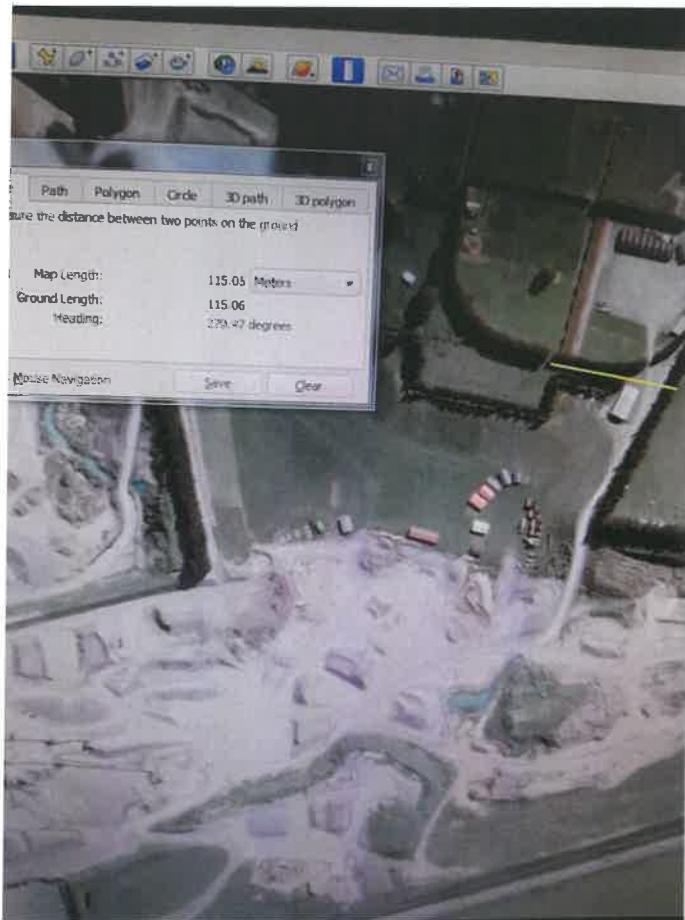




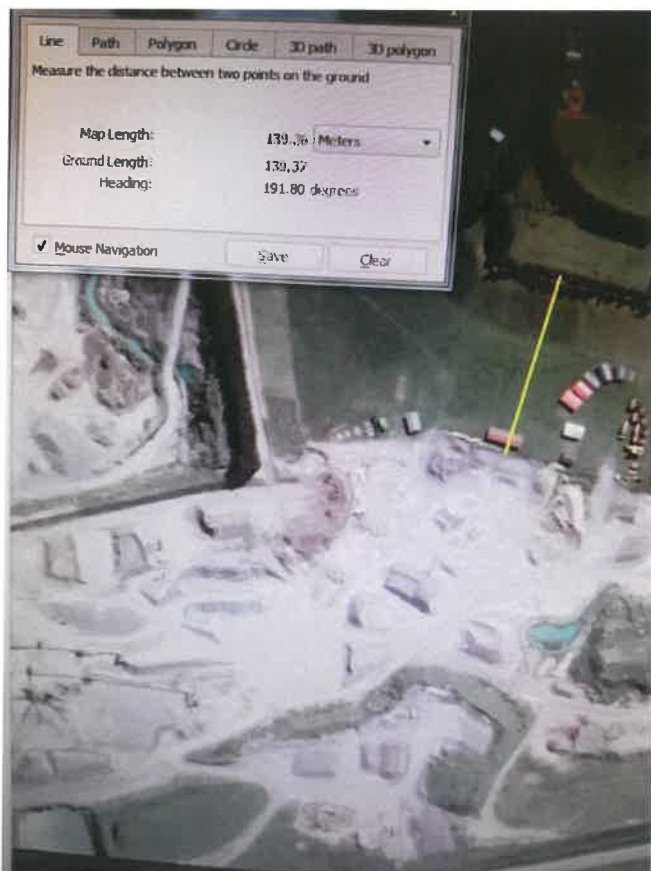
The above photo is from 2006 when we purchased our property.



The above photo is from 2017 and shows how quarrying has increased hugely since we purchased our property.



Separation distance of this proposed extension to our property boundary 115 metres.



Separation distance of Road Metals Quarry to our property boundary 140 metres.

Good morning my name is Annell McDonagh. My family and I own and live on 10 acres at 175 Old West Coast Road. We purchased our property in 2006. We did not start living on our property until 2008 when we built a house.

We moved to our lifestyle block when our children were young to give them a nice country lifestyle. We already lived in the Yaldhurst area and our children who are teenagers now attended Yaldhurst Primary School.

We thought we were doing a good thing for our children when we purchased our property and moved here. Now we have discovered they have been put in danger with dust exposure and drinking water issues. When we moved here we knew there was a Quarry Zone but we did not buy into the Quarry Zone we purchased in the Rural Zone. To get to our property from the city from Old West Coast and Buchanans Road you do not drive past any Quarries. Winstones is past our property and Road Metals is at the back of our property on Main West Coast Road.

If we had of known the dangers of Dust and Crystalline Silica back then and that New Zealand is very backwards in regulations to protect their residents we would have not purchased in this area.

We are in a situation that is probably not a common occurrence. How many submitters would you come across that have had to write submissions opposing 4 lots of Resource Consents in 4 years that would affect their property and family. All opposing large companies applying for Resource Consents around non complying activities to the west, east, south and now again the east of our property.

The first one was Winstones Extension which brought extraction 150 metres to our boundary. The second one was Faulks Investments Ltd getting Resource Consent for a very large trucking yard (six days a week – 6am to 7pm) on 10 acres of rural land next to our property that used to be a family home. The third one was CAPG Resource Consent to dig deeper at their Quarries. Thankfully this one was declined as we are close to Road Metals and Winstones who were both involved and wanting to dig deeper and this would have extended the life of their Quarries for many years. Especially Road Metals as it would have been an inadequate separation distance according to Victoria EPA and the CDHB to our property boundary to protect us from dust and health effects.

When we purchased our property it was common knowledge that the Quarries did not have many years of extracting aggregate left in them. Quarries have a finite life so we knew they would not be there forever. We built our house at the front of our property. Up until recently you could not build a house within 200 metres of a Quarry I understand this is now 250 metres. But Quarries are being consented to have

lesser separation distances. We also have a council permitted sleepout on our property.

We thought zoning protected your property. For us this was Rural Zone not Quarry Zone. Six years after moving in we discovered this was not the case with the Winstones extension and Faulks Trucking Yard.

With reference to the Summary of Murray Francis

I know that most people do understand the need for Quarries, but not on my back door is the problem.

Mr Francis we do understand the need for Quarries but sorry yes "close to our back door" is a problem when they are creeping closer from 2 directions West and East and unsatisfactory separation distances. They shouldn't be creeping closer to our back door and sacrificing our health and amenity value to increase their profits.

We do generally get on well with our neighbours and do try to interact with them.

We have owned this property for 12 years. I have only meet Mr Francis once in person in those 12 years. This was when we first moved into the property. The other times I have seen Mr Francis is at the Harewood Gravels Environment Court Hearing supporting 2 lots of Yaldhurst friends who are involved in that one. But never had conversations with Mr Francis at those.

Last October Mr Francis phoned me at the end of October to see if we would sell as he had heard we were fed up. I explained to Mr Francis no he had heard that wrong. The truth is we are not fed up with our property but fed up with all the crap that goes on around it. I also explained to Mr Francis that my concerns if we sold would be for our neighbours across the road.

Road Metals now own the property beside of us to the West and via our ex neighbour has tried to get us to swap land. Us have the front of the 2 properties and Road Metals have the back of the 2 properties. We obviously said no.

My concern for my neighbours is if we sold here it would become another Quarry extension. My neighbours across the road in 2 properties already have health issues.

In my opinion there has been bit of interaction with neighbours though leading up to this hearing. Opposes suddenly changing their mind.

Evidence of Murray Francis:

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The supply of gravel is, in my view, just as important to Christchurch as clean air, clean water, and providing for a safe environment..

In my opinion this statement is very different that a person would compare aggregate with clean air and clean water. For the obvious reasons that clean air and clean water are necessities of life and you would die very quickly without them. Aggregate is not a life supporting component but can be a life threatening one.

Mr Francis may consider this new extension is necessary and will assist with the rebuild of Christchurch. Road Metals is not the only company that supplies aggregate and in recent years the SOL and Frews Quarries have also opened.

Also Quarries have been busy land banking. Christchurch Readymix has purchased approx 8 lifestyle properties on the Southside of Chattertons Road.

Fulton Hogan has a huge 400 acre area in Templeton.

Also on the market at the moment is 100 acres in Yaldhurst on the Corner of Buchanans Road and Main West Coast Road. Rumoured to have Quarries negotiating.

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Since being established, the business has grown in size but the essential nature has remained the same; it is a site of gravel extraction and crushing, processing, stockpiling and retailing.

The business has grown in size at this Yaldhurst Quarry as Road Metals has gained permission to expand into Rural zoned property. These extensions have all been given consent even though they are not a safe separation distance from neighbours.

Mr Chapmans Opening Submission

When Mr Chapman did his opening submission he described Road Metals and their sites. He described only Yaldhurst and West Rolleston. He never described the site at the Waimak but Mr Forbes when doing his summary mentioned the Waimak site.

The experts of Road Metals may possibly tell you that as residents we should not be listened too as we are not experts. This has happened in the past to us before at another resource consent hearing by the same law firm here today when they had the right of reply.

Yes we are not experts in quarrying, hydrology and groundwater etc. But we are experts in living near the proposal that is being requested here – a quarry extension.

We certainly are experts at being residents and having to deal with Resource Consent Monitoring and compliance. Monitoring and compliance of Resource consent conditions is not being properly done by Ecan the authority that is in place for this job. I will come back to this later.

Victoria EPA

Ecan employed Tonkin and Taylor to do a report on separation distance for notification for this Resource Consent hearing.

Tonkin and Taylor used Victoria EPA information from 2007.

I pointed this out to Ecan that 2007 was not the up to date information but Victoria EPA 2013 was and Ecan were not concerned.

The authority that is here to protect our water and environment should be using the latest and up to date information. They should also expect any other experts they call on to use updated information also.

I contacted Ecan with my concerns that in my opinion Tonkin and Taylor misrepresented Victoria EPA.

Ecan's response was to go back to Tonkin and Taylor (who promotes themselves to the quarry industry) and did not contact Victoria EPA (the neutral) company.

<https://www.tonkintaylor.co.nz/what-we-do/geotechnical/quarry-and-mining-services/>

On a few Emails to Ecan I had to keep asking if they had contacted Victoria EPA over this issue.

Environment Canterbury came back with the reply on the 8th March 2018 that their Chief Operating Officer is happy with their decision and they do not need to contact Victoria EPA.

To me this gets alarm bells ringing that the authority in our area that is there to protect the Environment and residents won't contact the neutral company Victoria EPA to confirm information.

Victoria EPA 2013 clearly states 500 metres separation when Crystalline Silica is involved.

Tonkin and Taylor said Ecan should use 250 metres separation for notification and referred to Victoria EPA guidelines. Maybe this was in the past but not now.

Victoria EPA is a huge organisation compared to Tonkin and Taylor.

Victoria EPA would have increased the separation distance for a reason.

Tonkin and Taylor said because this is an "extension" and does not involve crushing and processing Victoria EPA separation would be 250 metres.

So if it is supposedly 250 metres in the opinion of Richard Chilton and Ms Simpson why are they not saying the separation should be 250 metres?

They are trying to minimise the distance again with an archaic "suite of mitigation".

So I contacted Victoria EPA. Not the first time us or Yaldhurst residents have either.

Two Victoria EPA staff have confirmed that where Crystalline Silica is involved and where there is residual air emissions (in this case dust) it is still 500 metres.

Even if there is no crushing or processing the separation is still 500 metres when Crystalline Silica is involved.

Ecan are expecting dust to air and this is why we are here today;

A discharge dust to air permit!

On the following pages is communication we and other residents have had with Victoria EPA confirming the separation distance of 500 metres.

The 500 metres separation is with good mitigation practices too not with no mitigation.

The mitigation measures in Canterbury are to use an outdated water cart and not good automatic sprinklers that can come on anytime 24 / 7.

Craig and Annell

From: "Craig and Annell" <camcdonagh@snap.net.nz>
Date: Friday, 2 February 2018 1:29 p.m.
To: <contact@epa.vic.gov.au>
Attach: Victoria EPA - separation distances 001 (2).jpg
Subject: Separation distances

Good afternoon from New Zealand.

Could I please ask a question about Victoria EPA Separation distances from Quarries with Respirable Crystalline Silica.

If a Quarry (that contains Crystalline Silica) expands into neighbouring properties and is going to be excavating (to approx 10 metres deep), stockpiling, have haul roads and truck and machinery vehicle movements

would they fall under your recommended 500 metres separation distance attached?

They are going to excavate and take the product back to their main Quarry for processing.

Kind regards
Annell McDonagh

Sent: Monday, February 12, 2018 12:56 PM

To: camcdonagh@snap.net.nz

Subject: EPA Publication 1518 - Recommended separation distances for industrial residual air emissions

Hi Annell,

Thanks for your enquiry.

EPA Publication 1518 - *Recommended separation distances for industrial residual air emissions* (March 2013) includes a separation distance of 500m for a quarry with respirable crystalline silica. This covers the following activities in relation to the quarry – quarrying, crushing, screening, stockpiling and conveying of rock.

In a rural setting, this distance is measured from the activity boundary of the industry, to the activity boundary of the sensitive land use (ie. house paddock on a rural property).

In an urban setting, this distance is measured from the activity boundary of the industry to the property boundary of the sensitive land use.

More information in relation to measuring these distances is included in EPA Publication 1518 – *Recommended separation distances for industrial residual air emissions* (March 2013), which includes diagrams explaining the measurement process. The publication is available on our website.

Without detailed information in relation to the proposal you are enquiring about it is difficult to provide a complete answer. However from the information in your email it would seem that if the proposal was situated in Victoria, the 500m separation distance would apply to the excavating and stockpiling proposed.

I hope this information assists you. Please do not hesitate to contact me if you require any further information.

Kind regards,

Joanne Coupar
Senior Planning Policy Officer
Major Projects & Planning



Environment
Protection
Authority Victoria



Environment Protection Authority Victoria

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EPA acknowledges the Traditional Owners and custodians of the land and we pay our respects to their Elders, past, present and emerging. We're an inclusive workplace that embraces diversity in all its forms.



Craig and Annell

From: "Joanne Coupar" <Joanne.Coupar@epa.vic.gov.au>
Date: Monday, 12 February 2018 1:53 p.m.
To: "Craig and Annell" <camcdonagh@snap.net.nz>
Subject: RE: EPA Publication 1518 - Recommended separation distances for industrial residual air emissions

Hi Annell,



Yes the 500m would apply to the excavating of material with respirable crystalline silica. It applies where residual air emissions (in this case dust) would occur as a result of the activities being undertaken.

Kind regards,

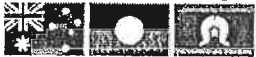
Joanne Coupar
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From: Craig and Annell [mailto:camcdonagh@snap.net.nz]
Sent: Monday, February 12, 2018 11:21 AM
To: Joanne Coupar <Joanne.Coupar@epa.vic.gov.au>
Subject: Re: EPA Publication 1518 - Recommended separation distances for industrial residual air emissions

Hi Joanne

Thank you very much for your reply.

Just another question:

If the stockpiling wasn't there but they were still excavating (to approx 10 metres deep), have open areas, have haul roads and truck and machinery vehicle movements and Crystalline Silica involved would they fall under your recommended 500 metres separation distance also.

Kind regards
Annell

From: Joanne Coupar

2/04/2018

Craig and Annell

From: "Gavin Scott" <Gavin.Scott@epa.vic.gov.au>
Date: Thursday, 22 March 2018 5:37 p.m.
To: "Craig and Annell" <camcdonagh@snap.net.nz>; "Joanne Coupar" <Joanne.Coupar@epa.vic.gov.au>
Cc: <wayne@snap.net.nz>; "Soraya Nicholas" <sorayanicholas@yahoo.com>; "Kelvin Duncan" <k.duncan.nz@gmail.com>; "Neil and Anne-Marie Youngman" <youngman.neil@gmail.com>
Subject: RE: Seperation distances - Crystalline Silica

Good Afternoon Annell,

I am sorry to hear about the issues you are having over in New Zealand. I am unable to provide specific advice internationally, as a public servant my remit is within the State of Victoria nor am I able to comment on your individual circumstance or geographical proximity to a proposal.

I am however happy to give a quick overlay of our separation distance guidelines. You are correct to apply the separation distance of 500 metres to quarrying with respirable crystalline silica. This 500 metres guidance is to protect against unintended emissions and presumes that an industry is operating at best practice.

Regards

Gavin

Gavin Scott
Team Leader - Assessments & Advice
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Richard Chilton

With reference to Mr Chiltons evidence:

Respirable Crystalline Silica

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Respirable crystalline silica (RCS) particles will be generated as a fraction of the fine dust emissions from the on-site activities.

Mr Chilton confirms in his above evidence that RCS will be generated from the on-site activities that is proposed for Road Metals Extension.

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In this instance, EPA Victoria recommends the following separation distances for quarrying (including crushing, screening, stockpiling and conveying of rock):

Without blasting (effectively gravel quarrying as proposed here) – 250 m

With blasting – 500 m

With respirable crystalline silica – 500 m

Mr Richard Chilton has this information incorrect. Any Quarrying that contains respirable crystalline Silica Victoria EPA recommends 500 metres separation as of 2013. This does not have to involve crushing and processing. Mr Chilton should have contacted Victoria EPA like we did if he is unsure of the separation distances.

He is after all a Dust Expert so should be up with these policies if quoting them regularly at very important Resource Consent Hearings that involve health issues. Would asbestos be treated in this way. Or maybe 2007 separation guidelines suited the applicants a lot better than 2013's.

Asbestos can be seen and is in buildings. If Asbestos was on our properties we would not be able to enter them. Crystalline Silica is very different to asbestos as mostly it is an invisible dust and can be inside buildings and outside in the environment. We can see Crystalline Silica on our windows when the sun is shining

on them in the right direction. It looks like beautiful colourful glitter. Very pretty but also seeing it on your windows brings home the fact it is there.

I have actually become a bit of a window stalker. When I go to peoples properties in the city I have a good look at their windows. I have seen no pretty prisms of colour in the city yet! But I have seen it on 3 other properties on Old West Coast Road and 1 property on Chattertons Road that backs onto KB's Quarry. .

With reference to Mr Chiltons Statement of rebuttal evidence on behalf of Canterbury Aggregate Producers Group (dated 6 November 2015) for the Proposed Christchurch Replacement District Plan:

8. In my experience, there may be cases where a quarry could be located within 250 m of sensitive zones (such as residential areas) with minor or less than minor effects. This would be on the basis that any such proposal would be evaluated case by case and have an appropriate level of mitigation.

Back when Mr Chilton made the above statement Victoria EPA had their latest 2013 recommendations of 500 metres where Crystalline Silica is present. Mr Chilton was presenting to the CCC evidence for Quarries that would be in their area. Quarries in the CCC area contain Greywacke Rock and involve RCS. Victoria EPA separation recommendations is not with no mitigation it is 500 metres with good mitigation.

Mr Chilton was the dust expert for the Winstones extension also that I was a notified party in. The hearing was held in December 2014. I note going over the evidence again that he refers at the Winstones Hearing to the Victoria EPA 2013 separation distance. Now 3 years later the same wrong information still being used of 250 metres.

Winstones Extension Hearing – evidence of Richard Chilton 11th December 2014

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In order to carry out a FIDOL assessment, I first screened for sensitive locations, beyond which I would consider it very unlikely that there would be any adverse effect. To do this I have used the separation distance of 250 m for 'quarrying without blasting', as published by Environment Protection Authority Victoria (EPA Victoria 2013)

At this hearing Mr Chilton was supporting quarrying 30 metres from a residents boundary and 100 metres from a dwelling.

The residents who suddenly had to share a boundary of 320 metres long with the Winstones Quarry extension had no choice but to sell up after being in their home for 16 years. These were our neighbours on the west of us. I can't blame them because who would want to stay living that close to extraction – 30 metres from their boundary. Of course if this person had put their property up for sale on the open market they would have had a huge issue trying to sell it. Real Estate Agents would have had to disclose what was next door. It was highly visible anyway with a bund that was 320 metres long. No hiding that! Their only option was to sell to a Quarry so this person sold the property to Road Metals Quarry. So Road Metals owns the 10 acres right beside us to the west of our property now and Faulks trucking yard owns the 10 acres to the east of us.

We are sandwiched between Quarry land ownership and a trucking company.

At the Winstones extension hearing (CRC150532) Mr Chilton made this comment:

"It is my experience that coarse dust impacts will typically be within 100 metres of a source. This is due to the majority of dust emissions falling out of suspension in the air and depositing on ground and surfaces within that distance".

Well Mr Chilton was correct with this statement. The Tewnion family at 202 Old West Coast Road – their dwelling 100 metres from Winstones extension can confirm to Mr Chilton he was correct – yes dust defiantly does fall within 100 metres!

The Tewnion property is also where Ecan did testing (K2 Report) and so did residents of the dust. These results came back with 30% Crystalline Silica.

This is due to the inadequate setback distance from Winstones Extension that Mr Chilton recommended.

This family had an expert submit at the Winstones extension Resource Consent hearing Dr Ian Hall who is well known cropping scientist. What he stated could happen has. The Tewnions now have cropping issues. But this was ignored by Commissioners and Ecan and CCC planners.

The Tewnion family (humans and pets) have had on going health issues as have other residents near the Winstones Quarry extension. All less than 150 metres from Extraction.

The Tewnion family also are within 500 metres of the proposed Quarry in question today.

Before the Christchurch Replacement District Plan Independent Hearings Panel

STATEMENT OF EVIDENCE OF RICHARD LESLIE CHILTON ON BEHALF OF FULTON HOGAN LIMITED (SUBMITTER ID. 2455) DATED: 29 OCTOBER 2015

*30 The intensity of dust impacts depends on the proximity to the dust source and the degree of mitigation applied to control emissions at their source. In my experience, the intensity of dust impacts associated with dust emissions from gravel quarry related activities are significantly reduced at a distance of approximately 100 m, **and beyond 250 m impacts should be less than minor**. A separation distance of 250 m is recommended by the Environment Protection Authority Victoria (EPA Victoria) for quarrying without the use of blasting² and in my experience this is frequently referred to by regulators in New Zealand including the CRC, when considering air discharges from gravel quarries.*

31 Adopting the EPA Victoria separation distance of 250 m from the Golf Course (see Figure 1)

Above Mr Chilton makes the statement beyond 250 metres impacts should be less than minor. He also suggests adopting the EPA Victoria Separation distance of 250 metres from the Golf Course. Mr Chilton seems more keen to protect golfers close to Quarries than families and animals in residences and on their properties outside. Golfers are not playing golf 24 / 7.

Like golfers walk around a golf course we walk around our property as we have horses, dogs and cows. Our animals have the right to be protected too. Why should golfers be better protected? In our opinion Mr Chilton considers the residents not at the same level as golfers.

In my opinion Mr Chilton seems to do the rounds of the Resource Consent Hearings for Quarries in the Yaldhurst area. I note though that Mr Chilton was not involved in the Frews Hearing. Commissioners decided 200 metres was appropriate for this one in January 2016. Then it got extended out to 250 metres during mediation with the residents prior to going to the Environment Court stage. This was before the levels of Crystalline Silica in Quarries was exposed in early 2017.

In the: DECISION OF THE ENVIRONMENT COURT

Yaldhurst Quarries Joint Action Group versus Christchurch City Council – October 2017

[98] Mr Chilton, an air quality scientist called by the applicant, identified: (a) the nearby SOL and Frew Quarries that could, when operating, "contribute to background dust levels in the wider receiving environment";⁷⁷ and

(b) other quarries and cleanfill operations further afield, namely the Yaldhurst

Quarry Zone approximately 4 km to the south and the previously described McLeans Island Rd quarries 1-2 km to the north of the subject site.

Mr Chiltons above evidence he is saying that dust from our area of Yaldhurst could travel 4kms. I would agree with Mr Chilton dust can travel a long way. If it can travel 4kms it certainly can travel 500 metres and less close to our properties.

Mr Chiltons Statement of rebuttal evidence on behalf of Canterbury Aggregate Producers Group (dated 6 November 2015) for the Proposed Christchurch Replacement District Plan.

Crystalline Silica

*11. Mr Cross highlights the potential adverse effects that can arise from crystalline silica. It is important to note that most rock contains silica, comprising either inert amorphous or crystalline silica. **Certain types of rock have higher levels of crystalline silica, such as quartz, but Grey Wacke (the rock that forms the majority of gravels on the Canterbury Plains) does not contain especially high levels to my knowledge.** Notwithstanding this, emissions of crystalline silica can be minimised through the normal suite of dust control measures, meaning that off-site exposure to inhalable levels of crystalline silica should be low.*

The previous page shows the ingredients of Greywacke aggregate and is taken from:

Winstones Aggregate Material Safety Data Sheet – Greywacke Products.

Revised 12/1/10

Page # 3

Composition of Greywacke Aggregate is:

- Silica – crystalline (quartz) Content (% w/w): <40%
- Naturally occurring metal oxides Content (% w/w): <5%
- Balance is innocuous silicates

Lets break this comments down:

Mr Chilton says above:

Certain types of rock have higher levels of crystalline silica, such as quartz,

If you look at the ingredients for the Greywacke aggregate at Winstones it is quartz the same rock Mr Chilton says has higher levels.

but Grey Wacke (the rock that forms the majority of gravels on the Canterbury Plains) does not contain especially high levels to my knowledge.

Greywacke ingredients are listed above from the Winstones Aggregates fact sheet. Mr Chilton is describing Quartz and Greywacke as 2 different products.

I think <40% would be considered high as when 30% Crystalline Silica was discovered from the balcony dust it was considered at the time a very high content percentage.

Mr Chilton should know the approx levels of Silica content of Greywacke Rock. He has been the dust expert at many quarry hearings:

He has been a dust expert for Winstones Quarry in 2014 – four years after their data sheet was revised in 2010.

In my opinion if Mr Chilton has not known the toxicity of the Greywacke rock he should not have been in the past or now suggesting mitigation for it.

COMPOSITION ∨

Appearance	Refer list of products.	
Ingredients: Silica – crystalline (quartz)	CAS number: 14808-60-7	Content (%w/w): <40%
Ingredients: Naturally occurring metal oxides		Content (%w/w): <5%
Balance innocuous silicates		

FIRST AID MEASURES ∨

Ingestion	Emergency procedures not normally required. may be a temporary irritant to the gastrointestinal system if excessive quantities are ingested. Seek medical attention if irritation occurs.
Eye contact	Immediately hold eyelids open, check for and remove any contact lenses. Flush eye with plenty of water for at least 15 minutes. Seek medical attention if irritation occurs.
Skin contact	Flush with copious quantities of water. Follow good hygiene practices and wash with mild soap and water after each exposure.
Inhalation	Remove person to fresh air. Drink water to clear throat and blow nose to evacuate dust. If coughing and irritation develops – seek medical attention. If not breathing give CPR and seek medical attention immediately.
First aid facilities	Eye wash, soap and water.
Advice to doctor	Treat symptomatically.

FIRE FIGHTING MEASURES ∨

Type of hazard	Not applicable.
Fire hazard properties	Substance is not flammable.
Extinguishing media	Use fire fighting media suitable for surrounding fire.
Recommended protective clothing:	Not applicable.

STORAGE AND HANDLING ∨

Handling	Dust suppression and/or use of covers. No other special handling requirements.
Storage	No special storage requirements apart from dust suppression and/or use of cover
Packaging	Not Applicable – products are not supplied in packaged form.

ACCIDENTAL RELEASE MEASURES ∨

Spill cleanup	Wear respiratory protection. Recover for re-use where possible. Avoid contamination of waterways. Material may block drains and waterway. Shovel, sweep or vacuum material into container taking care to minimise dust. Wet down if necessary to control dust.
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For a dust expert not to know this and not to even find out before these hearings is not a good look for an expert. Does this explain why he has not been mentioning the dangers of Crystalline Silica being quarried close to residents – because he is not knowledgeable on the rock being quarried?

This is also the same dust expert who Ecan were automatically going to use for the Official Ecan Monitoring being undertaken now. We raised concerns about this to Brett Aldridge of Ecan (who has now left) and his reply came back that yes they were going to use Richard Chilton.

We expressed our concerns to Amy Adams about Ecan using a dust expert that the Quarries use for their hearings. Amy also was concerned about this also so when we had a meeting at Ecan with Bill Bayfield, David Bedford, Brett Aldridge and Amy Adams – Amy expressed that this would be a big conflict to use the Quarries expert and then they agreed not to use him.

Then the dust monitoring was tendered out and took many months to start.

Yet ECan was prepared for Richard Chilton just to start on it immediately without any proper tendering for neutral experts.

The dust samples were taken from the balcony of 202 Old West Coast Road by Ecan after residents had been raising the issue of dust for a long time. There was no knowledge of how much Crystalline Silica was around. The dust matched the samples taken from the Quarry also.

Surely Ecan should have started testing properties and had a real concern for residents and tested the Quarry dust before supporting Consents. In our past experience Ecan and CCC rely on the applicant's evidence.

Ecan Dust Monitoring

We have one of these monitors on our property. I can not publicly state what site number it is.

It will be no surprise to the Road Metals team here that we have one on our property.

The monitor on our property was also tampered with on the night of the 31st January the night before a very strong predicted wind happened on the 1st February.

With reference to the evidence of Richard Chilton for this hearing:

*“Three exceedences of the hourly suggested trigger threshold for dust nuisance ($150 \mu\text{g}/\text{m}^3$, MfE 2016) were recorded at two monitoring locations on the same day (19 December 2017).” I note that these sites were Site 1 and Site 3, which are the closest to the Road Metals existing operation. For Site 1, located to the immediate north of Road Metals RM3 site, there was only one trigger occurrence. **Given the monitoring was during the dry months of December/January I consider this to be an isolated and infrequent occurrence**, which signifies to me a low level of short term dust events in the context of the FIDOL factors.*

Normally December and January would be dry months. But this has not been the case over this summer. Yes it has been a hot summer but we also have had more rain than usual. Normally our grass would be all brown over summer. This year was very different from other years our grass stayed a beautiful green. There was a higher amount of rain over this period than normal.

On the next page is the Rainfall measurement provided by Environment Canterbury for a period over winter last year (152mm) and over the Dust Monitoring period of 22 December to 21st 2017 to January 21st 2018 (127.6mm).

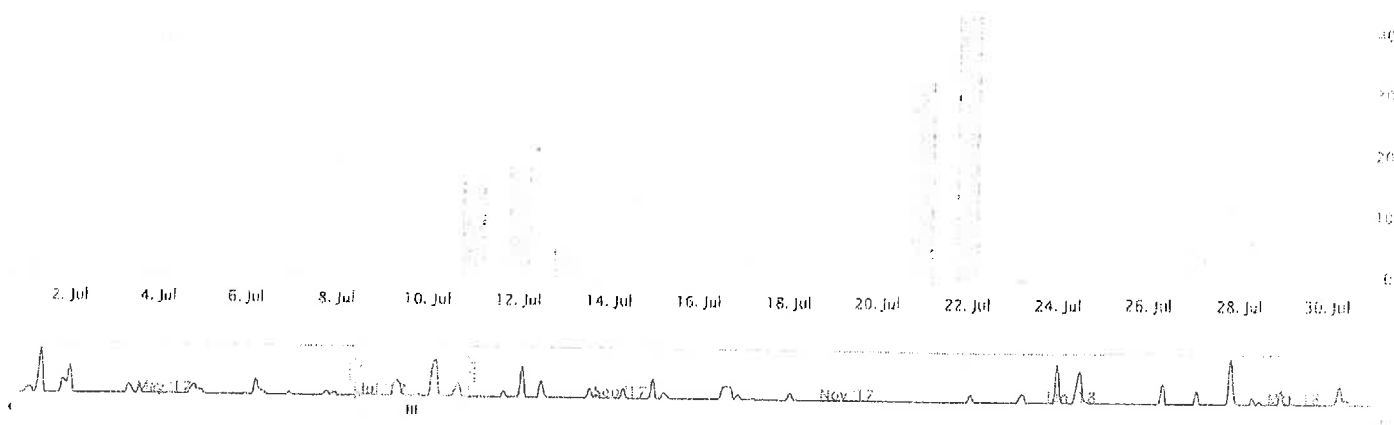
So only a difference of 24.4 mm.

Rainfall for Botanic Gardens (CCC)

Last sample (NZD std time)	Last hour	Rain today	-1 Day	-2 Day	-3 Day	-4 Day	-5 Day	-6 Day	-7 Day	Total Rainfall
2018-03-31T14:45:00+13:00	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	5.0	5.2

Rainfall 152mm from Fri 30 Jun 2017 to Sun 30 Jul 2017

Zoom 1w 1m 6m All



Christchurch
City Council

Information provided by

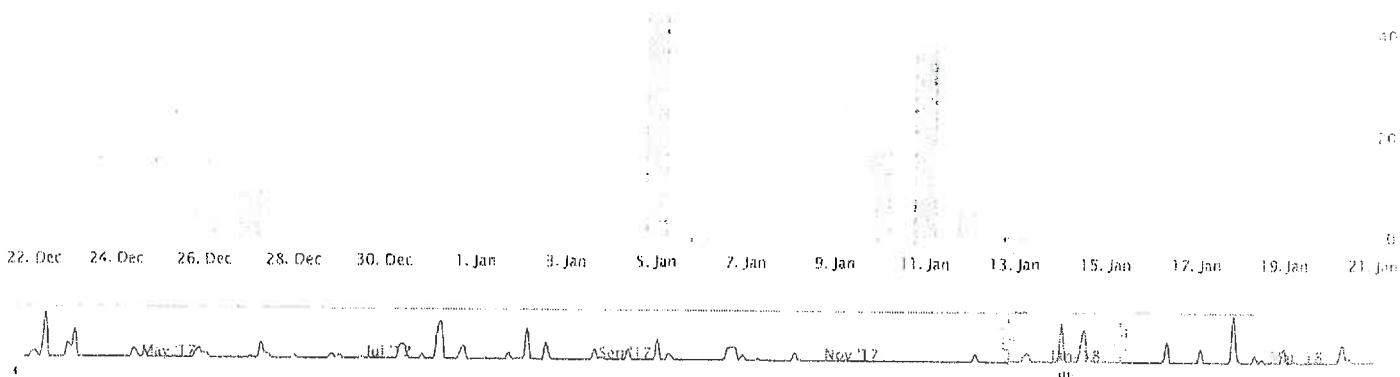
Environment Canterbury © 2018
Retrieved: 4:41pm, Sat 31 Mar 2018
<https://www.ecan.govt.nz/data/rainfall-data/>

Rainfall for Botanic Gardens (CCC)

Last sample (NZD std time)	Last hour	Rain today	-1 Day	-2 Day	-3 Day	-4 Day	-5 Day	-6 Day	-7 Day	Total Rainfall
2018-03-31T14:45:00+13:00	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	5.0	5.2

Rainfall 127.6mm from Fri 22 Dec 2017 to Sun 21 Jan 2018

Zoom 1w 1m 6m All



Christchurch
City Council

Information provided by

Environment Canterbury © 2018
Retrieved: 4:41pm, Sat 31 Mar 2018
<https://www.ecan.govt.nz/data/rainfall-data/>

Re Mr Chiltons evidence for this hearing:

38. *The event on 9 January 2017 (should be 2018) when all the nephelometers (including the background site) record a high PM10 concentrations*

On the official Mote Dust Monitoring report for the 22 December 2017 – 21st January 2018 it says the following regarding the background site so I don't know why Mr Chilton is reporting the background site recorded high?

In the early hours of Monday morning 9 January 2018, we lost contact with the BAM at Site 4 (background site). Our site visit on 10 January revealed:

*The site had been subject to powerful electrical surge. (This fault was unrelated to the fault on the same day at Site 2, refer Section 2.2). The surge by-passed the surge protector and seriously damaged the BAM rendering it inoperative. Due to the severity of the fault, we had to replace the instrument and the associated data logger. This was completed on Friday 12 January 2018 and the BAM has been functioning normally since. **There was a three day period of data loss from the BAM (9-12 January).***

However, it further appeared that the electrical fault also affected the PM10 nephelometer as the following day (Tuesday 9 January 2018) we noticed a significant increase in the PM10 concentration recorded by the nephelometer at Site 4. The instrument was still reporting elevated PM10 concentrations during our visit on Wednesday 10 January 2018 at which time we were unable to identify any obvious external source for the elevated PM10 concentration. Furthermore, the PM2.5 monitor at the same site was not recording elevated concentrations.

Further inspection of the monitor determined that the heater element on the inlet was not operating optimally. We therefore installed a second PM10 nephelometer at Site 4 on 11 January 2018. We now have sufficient co-location data from Site 4 to identify the date/time point at which the original PM10 nephelometer developed a heating fault. We intend to remove the faulty nephelometer soon. Due to the successful co-location, there has been no data loss for the nephelometer during this monitoring period.

RE the complaints made to Environment Canterbury 8 December 2017 – 21st January 2018

15 Jan 18 6:05pm - [Dust Old West Coast Road and the Main West Coast Road, Yaldhurst] ... there is very visible dust in the air over our area Old West Coast Road and the Main West Coast Road.

***2nd Incident Report** - 15/01/2018 6:00pm - ... a massive haze of dust...*

I put the above complaint in that day. Not the first complaint I have made about the dust that can be seen in the air above the areas of Old West Coast Road and Main West Coast Road. This is a dust haze up high in the sky not down low where at the ground level where the monitors sit. The monitors are measuring PM10 which is not a very visible dust. What we sometimes see is very visible. We have discovered that dust can sit in suspension in the air over our properties. It does not need to be a windy day.

Where the dust monitors are now the Quarries will be trying to in my opinion to restrict dust to those areas where possible.

Sensitive Receptors – Richard Chiltons evidence.

Mr Chilton lists Sensitive Receptors in his report. I note the distances he measures are to the dwellings but like other submitters will point out we have every right to be able to move around our entire properties with a good separation distance.

We are not on this sensitive list in fact I do not find anywhere in Mr Chiltons report about our property. I have measured our property as being 115 metres from extraction to our property boundary.

Mr Chiltons evidence:

44

*Collectively the Quarry zone covers a large area in the order of some **220 ha of exposed land** used for quarry purposes and related activities.*

220 ha is a huge area of exposed land! How do these so could experts think a water cart would get around all of that area in a wind event? The best mitigation is separation distances. Separation distance of 500 metres from Quarry boundary to residents boundary ensures that self monitoring that Quarries have been left to do for many years does not cause issues for neighbours.

These exposed open areas are exposed 24 hours a day and 7 days a week. Staff are not there 24 hours a day. Events can happen at anytime. I have only ever seen a water cart on Road Metals Quarry twice in the last 10 years.

45. In addition to dust emissions from the existing quarries, rural activites can also give rise to significant dust emissions on occasions. These rural activites can include cultivation, baling of hay and shifting of livestock. The Waimakariri River, which had a wide braided river-bed is relatively close to the site.

The rural activites – significant dust emissions on occasions!

This comes up at all the hearings. Seriously how can you compare a big open area of uncovered stripped dirt to one day a year of hay baling at maybe a couple of properties. We have not hay baled on our property for a few years. I imagine though hay baling would stir up the dust that lands on our properties from the Quarries though maybe that is the concern Mr Chilton means. As for moving stock usually the stock is walking on grass not exposed surfaces.

The Waimakariri River Mr Chilton says is relatively close to the site.

If we are supposedly experiencing dust issues from the Waimakariri Riverbed over 6kms away – than if this was the case the separation distance from us and a Quarry should be 6km.

The dust from the Waimak is not freshly Quarried or mechanically disturbed dust. It is weathered and usually rounded in shape. Freshly Quarry Dust has sharp edges.

I don't think I will lose any sleep over the dangers of the Waimak to my children. I think I would worry more about the Winstones extension to the west of us, the Road Metals Main Quarry to the South of us we have now found out is too close and now a proposed Road Metals extension 115 metres from our boundary. Mr Chilton mentions the Waimak over 6kms away but not once in his evidence does he mention our property.

Richard Chiltons Evidence – Separation Distance Criteria

56

However, the separate guidance from EPA Victoria¹⁰ does clarify that “as many dusts from quarrying and mining can be expected to contain silica, the MEA [maximum extent achievable] provisions apply to those activities that give rise to emissions of silica (e.g., crushing)”. Given this context, I consider that the separation distance of 500 m applies to the activities that have a high potential for generating RCS, most notably crushing and screening activities. However it would not apply to general aggregate extraction activities that are proposed in this instance.

10 EPA Victoria. Protocol for Environmental Management. State Environmental Protection Policy (Air Quality Management) – Mining and Extractive Industries. Publication number 1191, December 2007

Once again I stress the point why is a Dust Expert using outdated Victoria EPA information when there is a new updated 2013 version? This gives the wrong information to the Commissioners to make their decision and is unacceptable from an expert.

Separation distances are not intended as an alternative to source control. Instead they are implemented in addition to pollution controls that are consistent with the best mitigation options.

57

I note that this approach is broadly consistent with Ms Simpsons' evidence.

The reason Mr Chiltons approach is broadly consistent with Ms Simpson's evidence is because Ms Simpson in her Tonkin and Taylor report also referred to Victoria EPA 2007. In my opinion misleading happening from 2 lots of Quarry representatives that should know about updated information in 2013. I am a lay person and know! The updated 2013 version clearly states 500 metres and my evidence has proved that 2 staff members say that under Victoria EPA guidelines separation distance would be 500 metres for a Quarry Extension.

The definition of a Quarry is:

a place, typically a large, deep pit, from which stone or other materials are or have been extracted.

This extension will be a large pit from which stone will be extracted. But in this case Greywacke aggregate which contains a high level of Silica that can become Crystallised.

Complaint and lack of enforcement

There is so many things I could write here about lack of enforcement. But here is a recent example.

On the 1st February there was a wind event and I contacted the Ecan Pollution Hotline by email as there was no Water cart operating at Road Metals Quarry.

On the next page is the email I sent in at the bottom.

At the top is the automatic email response that comes back. This says a staff member will contact you within the next 2 working days to provide you with a reference number.

Well 2 months later I am still waiting for that staff member to contact me and that reference number.

Annell McDonagh

From: "Yaldhurst Air Quality Monitoring" <YAQM@ecan.govt.nz>
Date: Thursday, 15 February 2018 2:54 p.m.
To: "Annell McDonagh" <annell@snap.net.nz>
Cc: "steve.lowndes@ecan.govt.nz" <IMCEAINVALID-steve+2Elowndes+40ecan+2Egovt+2Enz@ausprd01.prod.outlook.com>
Subject: RE: Website footer contact form: #3205 EMAIL:09940008794

Hi Annell,

Thank you for your email. I have spoken with the Pollution Hotline and they have given me the following information:

"There were 19 dust reports over that period from across Canterbury (most in a 3 hour time frame). This is on top of other incident reports in the inbox a total of 49 for the two day period 01-02 Feb.

At times like this events are required to be prioritised.

When an event is assigned to an officer it is their responsibility to contact the customer within two working days.

Due to the increased workload on days such as this, we will come back to you as soon as practicable."

We are currently working through changes to our incident response processes and are expecting some improvements with this moving forward. In the meanwhile, we apologise for this delay, and we will continue to work with the team to ensure responses are given in a timely manner.

Kind regards,
Kaylene

From: Annell McDonagh [mailto:annell@snap.net.nz]
Sent: Tuesday, 13 February 2018 11:22 PM
To: Yaldhurst Air Quality Monitoring <YAQM@ecan.govt.nz>
Cc: steve.lowndes@ecan.govt.nz
Subject: Fw: Website footer contact form: #3205 EMAIL:09940008794

Hi

I put the below complaint in on Thursday 1st February. It is now the 13th February.

Also put another complaint on the same day in the evening.

I requested a reply. Received the below email saying a staff member would contact me within 2 working days to provide a reference number.

Have had absolutely no reply to my 2 complaints or a reference number.

This is not the first time I have put complaints in and not received replies and reference numbers.

Kind regards
Annell McDonagh

From: [ECInfo](#)

4/04/2018

Annell McDonagh

From: "ECInfo" <ecinfo@ecan.govt.nz>
Date: Thursday, 1 February 2018 2:09 p.m.
To: "McDonagh Annell" <annell@snap.net.nz>
Subject: RE: Website footer contact form: #3205 EMAIL:09940008794

Good afternoon Annell,

Thank you for your email. I have forwarded it to our Incident Response team. A staff member will be in contact with you within the next two working days to provide you with a reference number.

Alice

----- Original Message -----

From: no-reply@wufoo.com
Received: 1/02/2018 12:48 p.m.
To: ECInfo; Mailbox Customer Services
Subject: Website footer contact form: #3205

Name *	Annell McDonagh
Email Address *	annell@snap.net.nz
Contact Number *	0272286139
Enquiry type *	Pollution hotline
Type your enquiry here *	Hi I live at 175 Old West Coast Road. We have the predicted strong winds for today. According to Mote monitoring wind is over 10.8 m/s. We back onto Road Metals Quarry. Just been down the back and there is not water cart dampening down. I would like a reply to this. I also would like to know if Winstones and Winstones Extension are using dust carts today.
Referring URL	https://www.ecan.govt.nz/pollution-hotline/

31/03/2018

Cumulative effects

75

In my opinion, cumulative effects of the proposed quarry with the existing quarries (i.e., Fulton Hogan, Winstone Aggregates and Road Metals' main site) are likely to occur under strong dry winds from the west-southwest to the west, which are very infrequent (as shown in Figure 4b). Furthermore, the sensitive receptors to the proposed RM4 quarry extension are located more than 250 from these existing quarry activities, with processing plant on those sites being more than 800 m from the nearest sensitive receptor.

I would like to point out that our property will be a sensitive receptor to the proposed RM4 Quarry extension and we are not located more than 250 metres from the existing Quarry activities the distance is 140 metres from our boundary to the Main Quarry. Than Mr Chilton says that the processing plant at the Main Quarry will be more than 800 metres from the nearest sensitive receptor. This is untrue 800 metres from our property would be way over Main West Coast Road towards the prison.

83 Mr Harrison reaches the conclusion that effects will be more than minor and the application should be declined. This is despite the clear findings of Ms Simpson's report and the straightforward recommendations from her regarding what she considered would be required for her to reach a conclusion that adverse air quality effects would be less than minor. I support those recommendations of Ms Simpson and consider that those matters could have readily been addressed through consent conditions by Mr Harrison.

Once again I stress that Ms Simpson has used out of date 2007 Victoria EPA information and not up to date 2013 information on separation distances. There should only be one exceedance of PM10 per year and there has already been one on our property over one month. This was over summer but was also over a period that had higher rainfall than normal for that time of year.

86.4

Monitoring for PM10, PM2.5 and RCS is currently being carried out around the Yaldhurst Quarry Zone by CRC. The results of this show very infrequent hourly particulate matter trigger level exceedances to the north of the zone

The only monitor to the North of the Quarries that is measuring PM2.5 and Pm10 is 245 metres from the Winstones extension extraction. The distance to Winstones Main Quarry open exposed area is even further. This same monitor is 800 metres away from where this Proposed Road Metals Extension will be extracting and is 800 metres from where Road Metals Quarry boundary starts behind our property. So the information that is obtained from this will be of no use to this consent. This monitor is also about 700 – 800 metres from Winstones crusher.

The Quarries should have to prove health safety before consent – the residents should not have to prove the health issues. But the applicants for this Quarry have no medical experts to back them up so it should be declined. Mr Chilton should not be given priority over the CDHB.

48

Mr Harrison's S42A report also refers to consultation undertaken by CRC with the CDHB where Mr Matt Willoughby of CDHB advises that a 500 metre setback to the boundary of residential properties should be maintained or the application should be declined.

The CDHB agrees with Victoria EPA separation distance of 500 metres from Property boundaries. Victoria EPA is with good mitigation too. Not archaic old water carts. Modern technology is automatic sprinklers.

In my opinion the health advice of the CDHB should prevail over any expert here in this room. The CDHB has access to the medical records of Yaldhurst residents who are already living close to Quarries.

There is residents who live very close to Winstones extension within 140 metres and less and within 500 metres of this current proposal who have already been for extensive tests with Respiratory Specialists and are experiencing problems associated with Quarry dust.

The Canterbury Medical Officer of Health Dr Alistair Humphrey in a media statement in January 2018 said that the new testing system was only designed to see if residents developed health problems at the far end of the spectrum, such as symptoms of the lung disease silicosis.

While he welcomed its informing the understanding of whether people exposed to the dust face long – term health problems, he suggested it was undermined by a “fundamental” flaw in that it ignored lesser health problems such as the painful sore throats, conjunctivitis and nose bleeds.

“What it is measuring is whether it is going to kill you. It is not measuring whether life is worth living”

The symptoms of being affected by mined silica dust are akin to "sandpapering your eyeball or the back of your throat" or "rubbing an emery board up and down inside your nose".

"Those symptoms are quite distinctive, and that is why the respiratory physicians have been able to say this is silica, not just any old dust.

"The fundamental problem is this study will not address those issues at all.

"This study is only designed to see whether people in the Yaldhurst area are likely to develop silicosis.

"But imagine a woman or a man who has been getting nosebleeds for the last five years, they might say, 'Well thanks very much, but am I going to continue to get nosebleeds?'

"The answer would be you probably are if you are going to continue to be exposed to this dust."

Humphrey said the study paid no heed to the impact dust could have on people's quality of life through constantly having to deal with dust covering their clothes, cars and gardens, something local authorities were obliged to examine by law.

That role was left to the subjective opinion of ECan's enforcement officers, who may underestimate the devastating repercussions it could have for people in the long-term, he said.

<https://www.stuff.co.nz/the-press/news/100725500/question-marks-over-adequacy-of-tests-for-toxic-quarry-dust>

At the end of this submission is letters from doctors and respiratory specialists for myself and other Yaldhurst residents who all live within 500 metres of this proposal.

Myself and my children had never been asthmatics but many times we have had to be prescribed Prednisone by our doctor for coughs, breathing and wheezy problems in the last few years. My children regularly have sore throats and over the last few years have had to take many days of school for them. In 2014 at the height of the rebuild of Christchurch my doctor had to send me for a Chest Xray for a cough I still had after months. I showed my doctor videos of the dust at the time we were experiencing and he said if my Xray came back clear and I don't have lung cancer etc it will be the dust. My Xray came back clear.

My husband has blood in his nose some mornings. It is not like a normal nose bleed. For him it is having to blow the nose most mornings and there is blood. Craig is not the only local resident who has this issue also.

Nosebleeds may occur in cases of those with sensitive nose membranes due to abrasion of sensitive tissue.

Certain sensitive populations may experience more severe outcomes when exposed to PM10 and PM2.5. Such sensitive populations include more susceptible groups, such as the very young (in particular babies, infants and children), pregnant women, the health-compromised (eg, diabetics, asthmatics and people suffering from cardio-pulmonary disease) and the elderly.

Some local residents that are suffering more than us are home more and so around the dusty environment more.

..

Again I stress:

In my opinion the health advice of the CDHB should prevail over any expert here in this room.

In my opinion there has been no environmental assessment for our property by any of the experts especially the dust expert here today for the following fact:

If this proposal goes through our property boundary will be an unacceptable distance to 2 x Quarry extensions and a Main Quarry. All containing Crystalline Silica.

Richard Chilton doesn't even mention our property.

1.3.2 Resource Management Act 1991

*The purpose of the RMA as specified in section 5(1) is “to promote the sustainable management of natural and physical resources”. Section 5(2)(c) provides for “avoiding, remedying, or mitigating any adverse effects of activities on the environment”. ‘Effect’ is defined in section 3 of the RMA as including: (a) any positive or adverse effect; and (b) any temporary or permanent effects; and (c) any past, present, or future effect; and **(d) any cumulative effect which arises over time or in combination with other effects– regardless of the scale, intensity, duration or frequency of the effect, and also includes–** (e) any potential effect of high probability; and (f) any potential effect of low probability which has a high potential impact.*

I raise here the Cumulative effect that 2 x Quarry extensions, a Quarry with crushing and processing close to our boundary having its life extended and a large trucking yard beside us would create. Also the groundwater problems we experience that will be explained soon. We are in a Rural residential area but have no families beside us anymore just all of the above.

When is Enough, Enough?

Section 2 of the Act defines “environment” as including: (a) Ecosystems and their constituent parts, including people and communities; and (b) All natural and physical resources; and (c) Amenity values; and (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters. The term “amenity values” is also defined in section 2 of the RMA, as:

those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes.

I ask how do you think our Amenity value is now? When we moved in to our property the 2 neighbouring properties were owned by families and we had grazing horses not the Faulks Investments trucking yard we now have beside us on one side and Road Metals Quarry ownership on the other side and Winstones Extension.

The pleasantness of our property has severely decreased through no fault of our own.

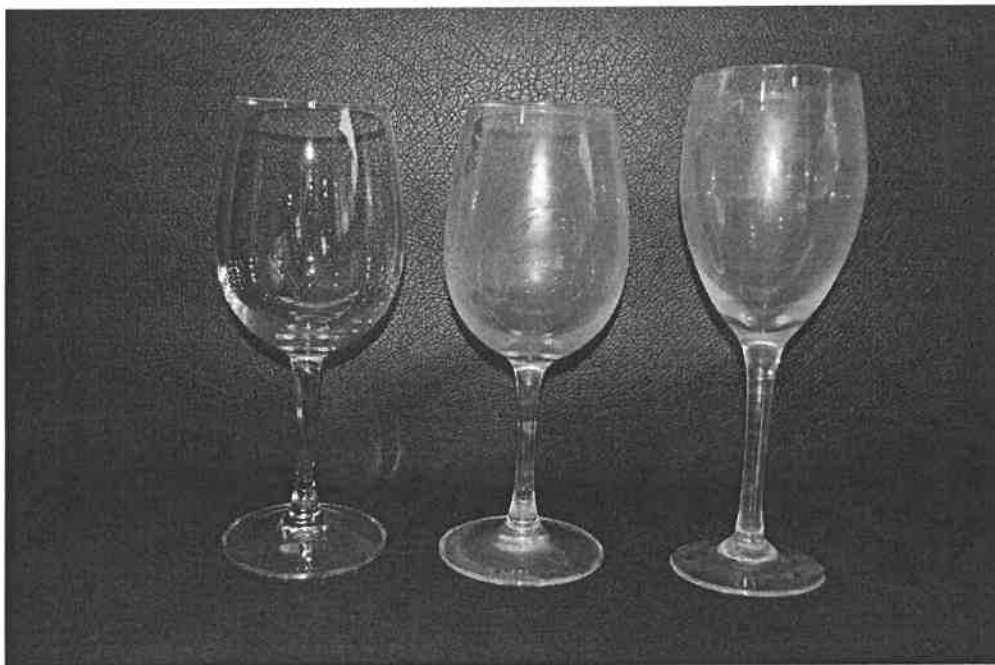
Our experience of living near a Quarry extension:

- Dust
- Noise – we hear loaders moving around and aggregate being dropped into trucks
- Drinking water issues

Our well is situated downstream from Winstones and their extension. Extensions with inadequate separation distances bring quarrying too close to residents and their wells. In my opinion digging a hole 10 metres deep too close to a resident takes away all that natural filtration water has and goes through before it gets to a property close to the Quarry extension.

Our well number is M35 /10925 and is 36 metres deep. Our well is only 150 metres from extraction.

We have been having problems with our well since the end of 2015. Only since the Winstones extension started a few months earlier before that.



All our glasses and crockery etc were getting a white film on them. For a few months we thought it was our dishwasher. We purchased a brand new dishwasher - same problem. Then the penny dropped it was not the dishwasher but our water. We immediately stopped drinking our water and started buying bottled water. Ecan came on the 14th March 2016 but did not know what it was. So Ecan sent the glasses away to be tested and the results came back that the white film was caused by Calcium. So we have had to invest in a filter system to stop this.

If consent is granted will Road Metals give local residents a 100% guarantee that no contamination will occur at anytime.

Than in April 2017 last year we got a phone call out of the blue on a Saturday night from Dr Lisa Scott the to tell us not to drink our water. We had an Ecoli reading of 75 when it should be less than 1. This was a big shock to us as we didn't even know Ecan had been out to test our water the day before on the Friday. Luckily we had been drinking bottled water as we did not trust what was coming down stream to us because of the lack of compliance. If one of us had got very sick with Ecoli who would have been there to do anything for us nobody!

There is a well that is owned by Winstones M35/9284 that has very high readings of E-coli. This is situated approx 700 metres from our well but we are downstream of this.

From the CAPG digging deep resource consent decision:

326.

We do not accept that the raised calcium levels in the McDonagh's water supply can be dismissed as merely aesthetic effects and consider they should be able to clean their glassware and windows (and see out of them). We are concerned by the quarry operators lack of interest and action in investigating and remedying the problem. We consider it is unlikely to NOT be related to quarrying activities at Miner Road, but acknowledge that the cause-effect link is difficult to prove. We consider it is highly unfair to expect the McDonaghs to prove there is a problem and then to establish a cause. The RMA should protect local groundwater users from such adverse effects.

We went to a meeting at Ecan after this and were told that well owners are on their own and there is no protection for us. As we are not on the town water supply we do not come under CDHB protection. Environment Canterbury have been supporting

and handing out Resource Consents upstream from us. We had no control over this and we are the ones that put up with the effects because of lack of separation distance to our well and the useless monitoring and compliance of Resource Consents.

Central Plains Water Scheme

From a 2014 article:

<https://www.riverruns.co.nz/images/AggregateNewsJune2014.pdf>

Kevin Bligh is a Senior Planner in Golder's Christchurch office. Prior to joining Golder, Kevin held a resource management role at Winstone Aggregates and previously worked within local government. Kevin was also a long-term member of the AQA's Planning Committee. Kevin's presentation highlights the potential threats posed by irrigation schemes to quarrying operations, the benefits of taking a whole of industry approach to a shared problem, and ways to maximise the use of natural and physical resources. The recently approved Central Plains Water Enhancement Scheme has predicted an increase in groundwater levels in areas of authorised aggregate extraction of between 1 to 5 metres. This poses a threat to aggregate extraction operations within greater Christchurch where maximum excavation depths and associated mineable reserves are typically regulated by highest recorded groundwater levels.

.I hate the phrase "Helping with the rebuild". This phrase sounds like they are doing voluntary or charity work. Most of the companies I have heard use this phrase are usually making huge profits because of the quakes.

Earthquake damage needs are temporary – don't let it be another excuse as in this case. We all commercially and individually have a moral and ethical responsibility to protect all of our natural resources!

Quarries just don't want to bear the cost of relocating.

Complaints we have put in the past with regard to Road Metals is:

- Quarry trucks exiting and entering before and after their permitted time of 6am to 6pm.
- Also many complaints via email to Ecan staff and the Yaldhurst Air Quality team about the visible dust on Main West Coast Road.

With reference to the residents still living in the houses with extraction going on. In my opinion that is crazy. The owners of the Winstones extension property at 199 Old West Coast Road still live in their house. It was so dusty after the personal monitoring the resident did that Ecan paid for the cleaning of this house – approx \$1700.

The Quarry owner is making the mess and Ecan is tidying it up!

Commissioners before you make your decision I urge that you need to pick up the phone and ring Victoria EPA (the neutral company) yourself to confirm their recommended separation distances they advise.

Once again I stress that the CDHB should be listened to.

Conditions:

Modern technology needs to be used like automatic sprinklers, if bunds are used grassed and kept in a tidy manner and 3 rows of Native plants capable of reaching 4 metres in height should be planted. Sealed haul roads and Quarrying stopped at wind speeds of 7 m/s.

Ecan needs to visit more than the once every 6 – 12 months now that they do at Quarries.



Hon Amy Adams

Member of Parliament for Selwyn

19th June 2017

To whom it may concern

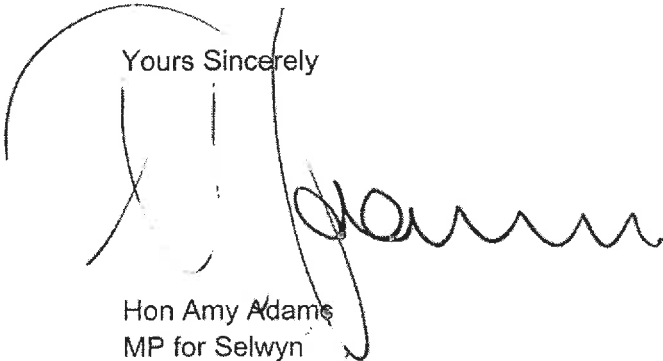
I am writing in support of the residents of Yaldhurst who have contacted me with their concerns about the increase in quarrying in their area and the increasing encroachment of these activities on their properties.

While I understand and support the need for provision to be made for increased aggregate demand, particularly during the rebuild, I have concerns about the impacts on quarrying activities that are located too close to existing residential properties. The residents are of the clear view that those who currently reside next to the Winstone Quarry on the Old West Coast Road are experiencing continual health issues which have been confirmed by medical practitioners as being as a result of exposure to Crystalline Silica.

I understand that health and environmental organisations have determined that a set-back of up to 500m should be maintained from the boundary of any quarrying related activity to any residential property to minimise related impacts on residents.

I support the position that no quarrying of Greywacke where silica dust is present should be permitted within 500m of an existing residential property and that quarrying inside this buffer zone should be a prohibited activity.

Yours Sincerely


Hon Amy Adams
MP for Selwyn

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fax +64 3 344 0420
email selwynoffice@parliament.govt.nz



Hon Amy Adams
Member of Parliament for Selwyn

15 FEB 2018

To whom it may concern

I am writing in support of the residents of Buchanans Road who have contacted me with their concerns about a proposal for a quarry in their area.

While I understand and support the need for provision to be made for increased aggregate demand, particularly during the rebuild, I have concerns about the impacts on quarrying activities that are located too close to existing residential properties.

I understand that health and environmental organisations have determined that a set-back of up to 500m should be maintained from the boundary of any quarrying related activity to any residential property to minimise related impacts on residents.

I support the position that no quarrying of Greywacke where silica dust is present should be permitted within 500m of an existing residential property and that quarrying inside this buffer zone should be a prohibited activity.

I have been advised that in this case only residents who are were within 250m were notified. I believe that this is not acceptable and that all those within 500m deserve to be included in the notification process.

Yours Sincerely

Hon Amy Adams
MP for Selwyn

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Templeton Medical

5 Kirk Road, Templeton.

Phone: 3496716 3498433

Fax: 3498388

Dear ,

Re: Mrs Annell McDonagh,

175 Old West Coast Road, Yaldhurst, Christchurch. Phone: 3424514

DOB: 17 Feb 1973, CELL: 0272286139

I am writing in my capacity as this ladys GP. I can confirm she has been seen three times in the last 6 months with upper respiratory tract symptomatology which correlates with raised dust levels on her property, currently subject to ECan monitoring. I am very supportive of her endeavors to keep her family safe from quarry dust exposure.

Yours sincerely

Derek Hann



8 May 2017

Dr Colin Ding
Grahams Road Medical Practice
76 Grahams Road
Burnside
Christchurch 8041

(EDI Account: grahamsr)

Dear Colin

**RE: Mrs Ann-Marie YOUNGMAN (69) 02.02.1948 NHI: EDE4166
190 Old West Coast Road, Templeton CHRISTCHURCH
H 3425858**

Problems:

1. 12 months of cough and dyspnoea
- likely driven by excess dust exposure in the home environment
2. Essential hypertension
3. Hyperlipidaemia

Lung Function:

FEV1 2.36 (111% predicted), FVC 2.84 (104% predicted), ratio 83
DLCO 17.7 (86%), DLCO/VA 99
Normal lung volumes
Nitric oxide 20

Medications:

Crestor 2.5mg alternate days, felodipine 5mg daily, bendrofluazide 2.5mg daily, calciferol strong 1.25mg monthly

I enjoyed meeting Ann-Marie and her husband today. She denies any significant respiratory history. She has had no history of significant environmental exposures until the last year or so. She is a never smoker, owns no pets that would link with lung disease. She worked as a laboratory worker in the seed industry for a number of years. She denies any atopy of family history of asthma.

In the last year or so she has noted shortness of breath with activity which generally occurs an hour or so after she has been up and moving around. She was actually investigated by a cardiologist for this dyspnoea last year with no concerning issues found. She had a clear chest x-ray at this time. Ann-Marie had a particularly bad bout of dyspnoea and cough around Christmas time and this occurred after having cleaned some outdoor furniture to clear some of the excess dust they have acquired around their property as a consequence of the adjacent quarry and transporting of quarried greywacke past their house. There has obviously been a well publicised health concern around this dust exposure for her and local residents of this quarry and I believe Alistair Humphrey (who I have copied in on this letter) has been involved particularly lately. I understand Alistair has made what sounds like a very reasonable recommendation regarding closing the quarry if dust exposures continues. The dust exposure seems to have been mitigated to a small degree by blocking the exit directly onto the road adjacent to their property but sadly the Youngmans have noticed a significant increase in dust again over recent days despite this change. They have shown photos today of the silica on their windows which is rather disconcerting to see and that was taken this morning.

On examination Mrs Youngman has clear lung fields. Her physiology is normal as is her exhaled nitric oxide.

I think Ann-Marie has symptoms relating to airway inflammation due to excessive dust exposure. The levels of dust exposure have been well recorded as being excessive recommended levels. The fact that they have been recommended to wear masks when working outside their house seems somewhat farcical as no one should really need to do this to protect themselves from such dust exposure. I am encouraged by Dr Humphrey's comments regarding closing the quarry if dust exposure continue. Hopefully, this actually occurs as this is the only viable intervention that I can see that would assist in addressing Mrs Youngmans immediate symptoms and obviously protect the local community from the potential hazards of sustained silica exposure. From what I have seen from Ann-Marie and other residents I have come across who I have also been asked to consult on, there seems to be a pattern of nonspecific respiratory symptoms attributable to airway inflammation with a clear time link to excess dust exposure without any clear pre-existing respiratory ailments that would drive such symptoms.

From the point of view of Ann-Marie's symptoms, it is possible that some inhaled steroids might help settle some

of her symptoms, but in truth we are not treating her asthma so it is questionable what benefit they may offer. As stated hopefully sanity will prevail and this problem will be addressed to mitigate against both immediate and long term consequences of ongoing excessive dust exposure.

Yours sincerely

(This letter has been electronically sighted and approved by the author)

Dr Richard Laing

Respiratory Physician NZMC No: 18211
cansleep(HLINKID)

Copy to: Mrs A Youngman (Email: youngman.neil@gmail.com)
Dr Alistair Humphrey, Medical Officer of Health, 310 Manchester Street, Christchurch City,
Christchurch 8013

26 September 2016

Dr David Zarifeh
Riccarton Medical Practice
59 Division Street
Riccarton
Christchurch 8041

(EDI Account: rictonmc)

Dear David

RE: Mr Wayne Barry TEWNION (53) 24.10.1962 NHI: ARB5093
202 Old West Coast Road, RD 6 CHRISTCHURCH
H 3427013 W 3421424 M 0276040004

Lung Function:

FEV1 3.30 (94%), FVC 4.4 (96%), ratio 0.76

Medication:

Breo ellipta inhaler 100/25 one daily

Thank you for referring Wayne who I reviewed today in clinic. He has no significant past respiratory history with notably no history of atopy, eczema or asthma. He has had a trivial smoking history. Wayne has been struggling with the issue of significant dust exposure from a closely adjacent quarry to his house and work environment. He has shown me some quite impressive photos of the dust deposition around his house but also the dust being whipped on the road left behind from the trucks departing the quarry. Wayne has obviously got a reasonable amount of documentation around dust exposures with assessments from ECAN which were limited due to technical issues and also wind direction during the assessment period.

The major concern here is that Wayne and his wife, and others in the area, seem to be getting significant dust exposure which appears to have a significant component of silica within it. Wayne, at a similar time over the last two years, has developed a dry, irritating cough that seems to be arising from his throat. It seems to be better when he leaves his home and goes to a holiday house in Twizel and tends to settle a bit in the wetter weather when there is less dust around. Certainly, circumstantial evidence would suggest that his cough could well relate to dust exposure. I have given him an asthma inhaler in the hope that it may offer some advantage. Of note Wayne's chest x-ray is clear and his lung function is within normal range which is reassuring.

I think the bigger picture issue here is what are the long term consequences of such dust exposure with the positioning of the quarry and the truck movement to and from the quarry. It appears that he will be exposed to significant amounts of respirable silica which seems to me to be completely unacceptable and I would support him in his endeavours to engage ECAN to address this issue and enforce the operator to take plausible steps around reducing dust exposure to himself and his neighbours and the local environment. I am planning to discuss his case with my colleague Mike Epton, who is a local expert around respirable particulate matter and its possible impact upon the lung with a view to potentially getting Mike to review Wayne himself or at least comment on the information we have available to us.

Yours sincerely

(This letter has been electronically sighted and approved by the author)

Dr Richard Laing

Respiratory Physician NZMC No: 18211
cansleep(HLINKID)

Copy to: Mr W B Tewnion (Email: wayne@blacktruffles.co.nz)
Dr Mike Epton

Dr Richard Newman • Dr Elizabeth Mangan • Dr David Zarifeh
Dr Heather Jefferies • Dr Charlie Clifton

Riccarton Medical Practice

02 Apr 2018

To Whom it May Concern,

59 Division St
Riccarton
Christchurch

Tel: 03-348 8711
Fax: 03-348 8710

Re: **Mrs Alison Tewnion NHI: CSP2920**
Address: **202 Old West Coast Road RD 6 Christchurch 7676**
DOB: **01 May 1966** Ph: **3427-013**

This is to update a letter written 30 May 2017.

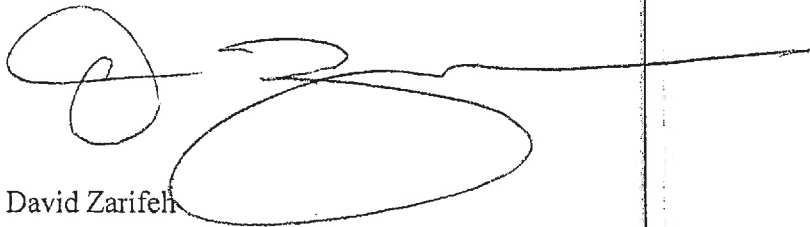
Over the last 7 months Alison has suffered repeated bouts of chest infection and on 4 occasions she has grown in her sputum Haemophilus Influenza, a bacteria indicating respiratory infection in her lungs.

She is awaiting respiratory specialist review but has been too unwell to have some tests performed prior to this.

This has developed after her being well over the last 20 or so years and I am very suspicious that it related to the dust exposure that exists in her environment.

I have advised her that in my opinion it would be best to shift away from this to allow her to clinically improve and stop the cycle of repeated infection.

Yours sincerely



Dr David Zarifeh

