

# Aggregate News

AGGREGATE & QUARRY ASSOCIATION OF NZ

### Keeping the momentum going

Welcome to our autumn edition of Aggregate News. It may be getting cooler, but things are heating up on a number of fronts.

wasn't personally able to make March's MinEx-led workshop in Wellington on Respirable Crystalline Silica (RCS) attended by 75 people at Te Papa and another 57 registered online.

But, by all accounts, the quarrying people, who were among those from several sectors attending, found it a powerful and productive day.

It is sobering to learn that the keynote speaker, Melbourne mother of two Joanna McNeill, contracted the disease while working in the office of a local quarry.

While the risks with RCS are most potent in the manufacture and installation of engineered stone products, there is a clear signal that our sector needs to up its game to protect our workers against the dangers of silicosis.

One advantage we do have is that extractive sites already have health checks in place for our workers – as well as oftenrequired dust controls – which aren't required in other sectors. MBIE estimates 80,000 Kiwi workers are being exposed to high levels of RCS. That's 74,000 more than work in our industry.

While the Government must provide the lead and resources to deal with silicosis, it looks like a pan-industry approach will now develop to help limit RCS across construction, concrete, extractives and other affected sectors. Let's all ensure we do our best to share our learnings and best practices and maintain these within our industry.

No doubt silicosis risks will be one of the topics of discussion at this year's QuarryNZ conference. The event is shaping



Quarrying was well represented at the pan-sector workshop on silicosis.

up to be a sell-out, with all internal booths already taken. I'd urge those of you coming from the mainland or Wellington to book airfares early along with your registration. (See story page 4.)

This Aggregate News also includes an important story on the need for Wellington to maintain the momentum for improved aggregate supply to our capital city and surrounding region. The region's council and iwi leaders have acknowledged they need to secure aggregate supply if they want to see the necessary infrastructure, roads and homes built. Some potential future sites were due to be announced early this year, and that news was keenly awaited by our sector.

One welcome development is the emergence of the new technical guidelines on disposing of surplus soil. The guidelines were developed by WasteMINZ with input from others including the AQA. Soil makes up a large percentage of the volume received by quarry fill operations and we now need to ensure those who supply surplus soil are aware of – and following – the new guidelines. (See story page 5.)

Also have a look, if you haven't already, at the updated AQA Quarry Database. Our Technical Adviser Mike Chilton has helped bring this about and it's getting hundreds of views and positive feedback, especially from councils and contractors looking at their quarry options for projects.

When you consider there are nearly 3000 sites listed on the database it's a reminder how critical we are to this country's well-being and future.

Let's keep the momentum going – while looking after our workers. AQA

Jayden Ellis Chair, AQA

### Workshop highlights wide silicosis risks

Major and smaller quarry company representatives were among those attending a pan-industry MinEx workshop in March on addressing the risks to workers from Respirable Crystalline Silica.

While much of the focus on RCS risk is on those working with engineered stone, the keynote speaker was Australian mother of two, Joanna McNeill.

Joanna contracted silicosis working in the office of a Boral quarry in Melbourne. Sited about 90 metres from the crushing plant, it had holes in the floor. "I was constantly breathing in the dust. You could taste it on your lips."

She started her job in 2013 with a fiveday induction, and her duties included organising the toolbox talks for her quarry colleagues on health and safety.

"Nothing was ever spoken about crystalline silica. If someone had told me, Jo, this site was full of asbestos, I would have said no thanks to the job."

In 2019, after the birth of her second daughter, Joanna did a return to work medical and was eventually diagnosed with silicosis. She had to use Google to find out what it was. Since then, she's



Wayne Scott and Joanna McNeill at the pan-industry workshop on silicosis organised by MinEx.

been in hospital numerous times and faced other health issues.

"My lungs are scarred for life. We don't know what the future holds for me."

Joanna is unable to work but has been advocating for better controls on RCS since 2019. "Training is one of the most vital things."

The risks, she says, extend to many trades beyond quarries, including plumbing, electricians, builders, tunnellers, concrete and even support workers.

"I know of one lady who got silicosis from washing tunnellers uniforms and [later] died."

Joanna was a strong voice in the campaign that led to Australia banning engineered stone last year and implementing other protective measures including strengthening a national lung disease registry.

"Australia has done it. The rest of the world has to follow."

MinEx CEO Wayne Scott says the workshop strongly supported creating a lung disease registry in New Zealand.

"We had construction, tunnelling, quarrying, mining, concrete and glass companies attending as well as health and safety professionals, health researchers and government departments."

Wayne says a key aim of the workshop was to raise awareness about the risks of silicosis and encourage submissions to a Government consultation on how to reduce its risks.

An MBIE consultation document says around 270,000 workers here are likely exposed to RCS and about 80,000 probably have high exposure.

Wayne says given only around 600 work in engineered stone and 6000 in the extractives sector, silicosis risks require a pan-industry response.

He says all workers with any exposure to RCS deserve to have the health monitoring as required for those in extractives.

This was another option broadly supported by the MinEx workshop. There were a range of views on whether a full ban on engineered stone was required.

Wayne says he hopes a pan-industry group will emerge from the workshop to develop a clear position on what's needed to address the silicosis risks faced by any Kiwi workers. AQA

### Our capital region needs quarries

Wellington faces a looming aggregate shortage unless it accelerates work on planning for new quarries and supports existing quarry extensions, says AQA CEO Wayne Scott.



Wellington needs the Belmont Quarry extension and other quarry sites to meet its infrastructure and housing needs.

The region had seen its nine councils and local iwi involved in a Wellington Regional Leadership Committee initiative. This accepted that the availability of aggregate sources in the wider Wellington region is a long-standing issue needing resolution.

Initial work was done by the AQA and GNS Science identifying suitable aggregate resources throughout New Zealand. The NZ Infrastructure Commission then contracted GNS Science to identify potential extraction opportunities in high-growth areas including the Wellington region.

The Wellington Regional Leadership Committee was briefed on this last March. A study of suitable "aggregate opportunity sites" was commissioned for the region. This was to be shared with aggregate suppliers and the public early this year. Wayne says the momentum needs to be maintained if Wellington is to avoid aggregate shortages.

Meantime, an extension to Winstone Aggregates Belmont Quarry was one of 149 projects listed under the Fast-track Approvals Act. The company intends to lodge its application mid-year for consideration by an expert panel seeking approval to create a new overburden disposal area in a neighbouring regional park via a land swap. 31ha of higher ecological value land will be swapped for 29ha of regional park.

The company's fast-track bid said this is the only viable way for Belmont Quarry to continue, with less than two years of overburden storage capacity remaining. "The quarry's operational sustainability is at risk," it stated.

Allowing the quarry to grow with overburden placed nearby would extend its life for 40 years. Belmont Quarry produces

about 40 per cent of the Wellington region's aggregate needs.

Friends of Belmont Regional Park, opposing the land swap proposal, were told by Greater Wellington Regional Council Chair Daran Ponter that the fast-track legislation had 'leapfrogged' his council.

Wayne says the Council needs to recognise it won't see the infrastructure and homes needed in the Wellington region unless quarries can be extended or established.

"It would take five years or more for Winstone Aggregates under existing processes to get a decision on this land swap – which improves environmental outcomes. Even if it got approved, there'd likely be appeals delaying it further."

He says Wellington's leaders need to reaffirm their commitment to providing for the quarries the region requires. Wellington's aggregate supply could all but dry up from local sources within 15 years if the Belmont Quarry extension and another at Horokiwi Quarries do not happen.

"We will then be back to what we saw when building Transmission Gully – with rock carted from as far away as Taranaki at horrendous financial and environmental cost."

Winstone Aggregates says it wants to reassure the community that a key priority of the land swap process is preserving the area's environmental integrity and meeting DOC's standards.

"We look forward to engaging with community, including Friends of Belmont Regional Park, to better understand their concerns and explore potential opportunities for collaboration on the park's future." AQA

### Time to book for QuarryNZ 2025

#### It's now little more than three months to QuarryNZ 2025.

Conference organiser Melissa Bahler says Early Bird registrations have been selling well. The discounted packages close at the end of May. All internal space for booths has been sold out and there are 10 outside spots still available (at the time of writing).

While the Hamilton Claudelands venue is an easy drive for anyone from Auckland/ Northland or the central North Island, it's recommended anyone further south book their airfares ASAP. One option, particularly given Hamilton can get foggy in winter, is to fly into Auckland.

The conference programme is now all but complete. As usual it kicks off on Wednesday July 9 with the AQA and IOQ NZ AGMs followed by a session on technical issues before the TerraCat opening night dinner.

Thursday morning begins with the keynote address from Resources Minister Shane Jones, followed by Infometrics Brad Olsen giving an economic update. Then Infrastructure Commission CEO Geoff Cooper will outline the National Infrastructure Plan which will just have been released.

There's a health and safety focus after lunch. Francois Barton, Executive Director of the Business Leaders' Health and Safety Forum will outline changes to workplace health and safety and Chief Inspector Extractives Paul Hunt will give us WorkSafe's perspective. Veteran Canterbury quarryman Andrew Mahan will talk about achieving zero harm.

The afternoon concludes with some other quarry legends relaying the changes they've seen in the industry over many decades. Then it's the Real Steel happy hour and the evening free.

Friday morning sees a focus on sustainability and future-proofing quarry operations through embracing digital transformation. Later, there are presentations by Orica, MIMICO, Liebherr and Equip2. Clayton Hill from SLR Consulting in Australia will outline his perspectives on leadership with 20 lessons learned over 20 years in the industry.

Simon Court, Parliamentary Under-Secretary for Resource Management Reform, will update us on how that is tracking before a panel discussion on the same topic.

Then it's time to polish your shoes and get ready for the TDX awards dinner.

The AQA works with MIMICO to provide the MIMICO Environment & Community Award. This is a simple one-page form signed by a manager. Entries recognise the contributions made by member companies and their staff in caring for the environment and/or community. There's a \$3000 prize. Entry forms can be found on the AQA website. These need to be in by May 11. The cutoff for the IOQ NZ awards is May 31.

The Q&M Tomorrows Leaders awards are open until the end of April. If you have a deserving staff member for this award with its \$1000 prize to encourage industry leadership – ring the editor Alan Titchall direct on 027 405 0338.

A number of AQA members are now also attending the Future Roads conference. It's timely to get that in your diary. The event is also being held at Claudelands on November 19 and 20. AQA



Resources and Regional Development Minister Shane Jones is returning to address our sector at QuarryNZ 2025.



## New guidelines for surplus soil

### The AQA is welcoming new guidelines developed to improve the sampling of soil going into quarries and landfills.

W asteMINZ represents much of New Zealand's waste, resource recovery and contaminated land management sectors. It brought together input from those sectors, contractors, the fill industry and AQA to produce *Technical Guidelines: Characterising Surplus Soil for Disposal.* 

Recent analysis of quarry and landfill sites by the Ministry for the Environment and Pattle Delamore Partners (PDP) consultants confirmed soil makes a large percentage of the volume received. Some is used for quarry rehabilitation. In many regions it is also a circular commodity, screened and resold.

Most quarry fill operators have consent limits on the type and quality of fill they can accept, including, in some locations, contaminant limits.

The AQA is now urging its quarry fill members to ensure land developers, earthmoving contractors, construction companies and others who supply surplus soil, are aware of the new guidelines. Councils and government agencies are also asked to get up to speed.

For their part, quarries taking fill need to increase certainty on the quality and composition of the soils received and reduce any risk of non-compliance with their fill consent requirements.

The history of what went on at sites producing surplus soil helps identify if contaminants are likely to be present. These can include heavy metals, construction materials, solvents and volatile or semivolatile organics, hydrocarbons, pesticides and asbestos.

Whether a site's history or natural geology is well or poorly understood, a degree of soil testing is recommended for all sites producing surface soil.

Because soil contaminants can vary by depth and soil type, a surplus soil consignment to a quarry fill must not contain highly



variable soils such as sub-surface heavy clay mixed with loose loam topsoil or sandy aggregate fill with peat.

A home swimming pool excavation, for example, would contain two consignments: topsoil and underlying clay. Both would be sampled and analysed independently.

This would mean one sample for each 12.5 cubic metres excavated for a pool – the highest rate of assessment. If a site assessment is done by a suitably qualified and experienced practitioner, then soil samples are only required for every 250 cubic metres of surplus soil.

The WasteMINZ guidance is said to mostly be applicable for volumes of 1,000m3 or less. For larger projects consultation with a suitably qualified and experienced practitioner (SQEP) is recommended. SQEPs are approved under the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011 (NES).

The surplus soil producer has the responsibility to provide sufficient information characterising each consignment of soil to the receiver, when requesting a quote and approval prior to transport for disposal.

The quarry fill operator has the ultimate ability to accept or reject materials based on information presented plus any other relevant evidence or knowledge to ensure it can comply with its consents, regulatory and operational requirements. AQA

### AQA works for the quarry industry - join us today

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### AQA Technical update

#### **Quarry Database**

- The latest AQA Quarry Database has had hundreds of views since it was first publishing online, with positive feedback - particularly from local authorities and contractors looking at their guarry options for projects.
- The data is available and downloadable from Koordinates: https://koordinates. com/layer/120770-aqa-quarry-databaselatest/
- As at early March, there are almost 1300 commercial quarries and another 1600

other active quarries shown on the map.

- The quarry database is regularly reviewed but with such a large dataset there will be errors so I would appreciate corrections emailed to tech@aqa.org.nz.
- The original dataset on layer 118245 is unable to be updated - there is an unresolved error on the Koordinates website, so the alternate (latest) layer has been made available.
- AQA is identifying basic information on each quarry to assist with advocacy - e.g. hard rock vs gravel, small production vs large.

#### **Historic Quarries**

- Through analysis of historical data sources and terrain data, a map of historic sites has been created, with over 1400 sites shown.
- The data is available and downloadable from Koordinates: https://koordinates. com/layer/121858-aqa-quarry-databasehistoric/ .AQA

Mike Chilton, Technical Adviser, AQA



#### **AQA Board**

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Stacy Goldsworthy Winstone Aggregates

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