



Lime production ramps up – see page 41

Deliver us from hesitation

Winter greetings. As this is written New Zealand is in the grip of a big freeze. What a year this is proving to be.

It is also becoming clearer by the day that our economic recovery from the pandemic is going to be an endurance event. Our sector may be better placed than most to come through the pandemic's lingering economic effects but we are certainly not immune.

Our CEO, Wayne Scott, hits the nail on the head in his commentary in this edition; the scale of impact on the quarrying sector is largely dependent on how quickly the Government can turn its heralded multi-billion dollar infrastructure spend into truckloads of aggregate being delivered.

The Government needs to follow its own decisive lead in going early and hard on the pandemic and ensure this becomes the template for rolling out the roading and other projects. If we are waiting till next year until that starts to happen, then that freeze will regretfully impact on employment in our sector (see page 43).

You can be assured that Wayne and our AQA Board are doing everything we can to impress that message on all our politicians – Government and Opposition – including most recently at a meeting between quarry sector senior business leaders and Resources Minister, Megan Woods.

Obviously, these are mostly matters of timing because whether it's this year or next, the reboot of our economy will be reliant on quarries.

That, of course, extends to those in the lime industry supplying our farming sector which is the other key to our rebuild alongside infrastructure.

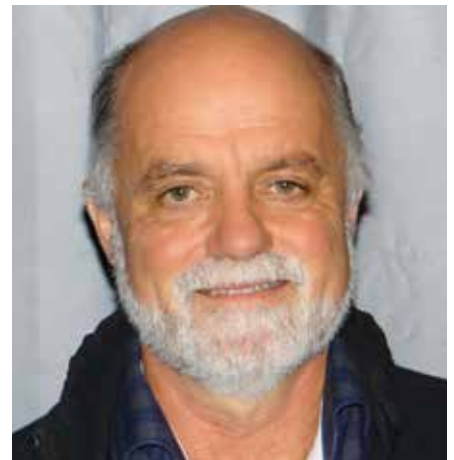
Lime production is often an unheralded component of our industry, so it's good to see that it seems poised for continued growth (see page 41).

Certainly, some real buoyancy across our industry was apparent a year or two back. In 2017, New Zealand recorded 41m tonnes of quarried material, or about 8.6 tonnes per person. Unfortunately, there was a drop in quarry reporting in 2018, but the estimated production was 65 million tonnes, or 13.4 tonnes per person, although this figure is imprecise because of the poor reporting.

AQA's Technical Adviser, Mike Chilton, reckons we are certainly using around 10 tonnes per capita, which is high by world measure and considerably up on 2017.

Mike's Technical Report asks all quarries to now provide their 2019 data to NZPAM. So, please help the AQA get a real handle on what our industry is achieving (see page 45).

One disturbing element in this edition is the stark statistics from Queensland forensic



Peter Walsh.

engineer Dr Sean Brady about quarries there having three times the serious injury rate of other parts of that State's extractive sector.

That commentary, with all its ramifications for us here in New Zealand, emerged just as WorkSafe's Chief Inspector, Paul Hunt, voiced his concerns on our industry's failure to be seen to be improving its safety record.

While our sector responded magnificently to the threat of Covid-19, we need to take that focus to all the other risks faced daily across our sites as we work to rebuild our nation's economy.

**Peter Walsh, Chair
Aggregate and Quarry Association**

Lime in the limelight

The lime industry in all its forms seems to have weathered the impacts of the pandemic better than most, and appears well-positioned for the economic recovery.



Stephen Esposito.



A Supreme investment in innovation by Ravensdown in Te Kuiti.

Oz Harvey, who manages the Fernhill Limeworks in Southland, says the region's wetter climate dictates that it's often busy during the drier months before winter, but this year things went gangbusters.

Traditionally, the sites run 24-hour shifts through autumn and worked through the Level 4 lockdown. Only a couple of staff aged over 70 could not work during this period.

"We had the remaining staff working 12-hour days to try and keep up with demand," says Oz.

"We were putting 400 to 500 tonnes a day through the plant and loading 1800 tonnes through the gate."

Unlike drier North Island lime operations most lime is kiln dried in the South Island to remove moisture.

Normally the Southland season ends in May, as winter rain sets in, but Fernhill was still loading out at the end of June.

Oz expects the demand experienced during lockdown was probably the peak, but he reckons there's a good future ahead for the lime industry.

That's a view shared by one of the giants of the industry – Ravensdown.

Stephen Esposito, General Manager Operations says Ravensdown has enjoyed a pretty good fiscal year, which he partly attributes to lime making something of a comeback.

Factors include the Government moving to put limits on nutrient loadings and run-off. Lime's ability to lift the pH level of soil improves the capacity of grass and other plants to absorb the nutrients being applied, meaning less run-off into waterways.

"For pasture growth, water and sunlight are the most important, then the pH and then the nutrients. Limestone is integral to that."

Stephen also notes that lime (and dunnite) are Ravensdown's only entirely New Zealand-sourced product and at circa \$30 a tonne, is very cost-effective.

Ravensdown operates six limestone quarries – two in the North Island and four in the South. Last year it invested more

than \$2 million in an innovative structure at its Supreme Lime Quarry in Te Kuiti, signalling its belief in the future of the industry.

Steve Levet operates the Silver Hill quarry near Wellsford north of Auckland. He says he has also enjoyed a good financial year with a particular boost through the lockdown.

"We were the only lime quarry in the district to stay open – we were so busy."

Silver Hill produces crushed lime and chip, mainly to line forestry roads and farm tracks, but also supplies Downer with material for use on Auckland roads.

Steve is the third operator of Silver Hills since it began in the 1950s. Around 36,000 cubic metres of crushed lime and chip is produced annually.

With the Government's focus on infrastructure and farming as the key to economic recovery, Steve reckons lime producers across the spectrum of uses will be in the box seat, even through some challenging times ahead. **AQA**



Queensland quarrying tops sector's harm rates

Forensic structural engineer Dr Sean Brady has already challenged Queensland's extractive sector's approach and record on health and safety; now he's zeroed in on the state's quarrying industry saying its serious injury rate is three times the sector's average.

Dr Brady's comments emerged just as WorkSafe produced its third quarterly report on the New Zealand extractive sector. Chief Inspector Paul Hunt commented on a fatality in an Auckland quarry in March in which a truck rolled.

He says WorkSafe was also starting to see consistent patterns in reported data, *"not showing any noticeable improvement and of particular concern to us is the frequency of high potential incidents."*

Earlier this year, Dr Brady's report to the Queensland Government was released, analysing mining and quarrying fatalities, serious accidents and incidents across a 20-year period. This has led to tough new State mine and quarry manslaughter legislation, including jail terms for senior staff where operators are found to have been reckless or negligent in fatalities.

He had assessed Queensland's 47 extractive industry deaths between 2000 to 2019 including six fatalities in quarrying amid 35,000 incidents.

In a recent IOQ Australia webcast, also offered by IOQ NZ, Dr Brady says he calculated the frequency of Queensland extractive sector deaths, serious accidents and serious potential incidents per million hours worked.

By hours worked per fatality, quarrying topped the list.

"You are statistically more likely to have a work-related fatality in a quarry than anywhere else per million hours worked, and it's head and shoulders above the rest of the resources industry."

The Brady report also analysed serious accident data from 2011 onwards.

"In 2018-19, quarries have faced a serious accident frequency rate of around three per million hours worked compared to the industry average of around one accident per million hours

worked," he says, while noting a decline in reporting potential serious harm incidents in the same period; just 23 per million hours worked or the equivalent of around 1.4 such events for someone working 30 years in quarry – a highly unlikely low number.

Dr Brady says fear is a likely factor in such low reporting.

"I think if there's a fear that the regulator is going to jump all over you because the number of reports you submit goes up. This can discourage reporting.

"The other factor that can discourage reporting is when people report a hazard or incident, and effective controls aren't put in place. There's a possibility people may think 'why bother?'"

WorkSafe's Q3 2019/20 report on the New Zealand extractives sector shows quarries account for about half of the 1263 notifiable events (deaths, serious injuries, serious potential harm incidents) over the previous 12 months.

"A sobering thought is that there are currently about 20-30 high potential incidents each quarter," says Paul Hunt, WorkSafe Chief Inspector Extractives in the High Hazards Unit.

"It is our intention to focus on the areas where many of these incidents are occurring and to use the high potential incident frequency measures as a measure of safety in our industry in the future."

Aside from WorkSafe collecting such data, MinEx also asks extractive operators to report its near misses so this can be advised to others in the sector, potentially avoiding future possible tragedies

Dr Brady says of the 47 fatalities in Queensland he analysed, human error or any other single thing was rarely the cause, rather a combination of factors like failure of controls, lack of training, or inadequate supervision.

*The Brady Review can be downloaded from the Queensland Department of Natural Resources, Mining and Energy website. The latest WorkSafe report on extractives sector is available under WorkSafe publications on its website. **AQA***

The best or worst of times

AQA CEO Wayne Scott recalls his fifth form English and the opening lines of Charles Dickens' *Tale of Two Cities* to sum up where we are as an industry in these times of post-pandemic.



"It was the best of times, it was the worst of times it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us ..."

That's about how I see where we are at the moment; we could be on the cusp of good times as infrastructure projects roll forward as the key to our economic salvation; or delays in getting projects started and a continuing deterioration in the economy may see many quarries and the nation facing tough times.

The current Government gets an A for early responses. Its call to close things down early and hard proved the right judgement. The wage subsidy has provided a lifeline for many of our members and the loans to businesses may have helped a bit.

We've now also seen the first of the 'shovel ready' projects announced, worth more than \$2.5 billion. With matching funding from councils and others this equates to a \$5 billion spend. And that's on top of the \$12 billion infrastructure spend announced in January before the lockdowns.

And then there's been the 'fast-track' process that, at time of writing, has seen 11 cycleway, rail, water storage and housing development projects announced, with more to come.

All sounds good, but even a fast-track project doesn't move that fast. The process of approval will take 45-70 days; then there are tenders and contracts to be determined. We will be lucky to see many, if any 'fast track' projects breaking ground by spring.

That's around the time when our industry's current momentum will run out of puff. There's only so much work in the pipeline. From conversations I am having with major and smaller companies and with other industry organisations, things are likely to dry up before Christmas.

Compounding the issues of delays with getting the Government's 'shovel ready' infrastructure projects off the truck and into the ground, we have an economic contraction.

Auckland Council faces a three quarter of a billion deficit after

income drops and a blow-out on water service costs.

It proposed cutting its transport budget by \$195 million. It has gained around \$500 million from the 'shovel ready' projects spend, so some cuts are likely to be off-set. Other regions may not be so fortunate.

Certainly, we are not likely to see much commercial building this year, and even home building will reduce. A new home takes 25 truckloads of aggregate, not to mention the footpaths and roads required to build new sub-divisions.

There are bright spots. Lime producers have been enjoying something of a resurgence and the mining industry is doing well here and in Australia.

That said, our neighbours will likely be looking for skilled labour from next year onwards after a huge spend on exploration. Traditionally, that's sucked a lot of needed skills across the ditch.

The key thing is keeping our own economy going, particularly the \$15 billion plus promised for infrastructure spend.

The Government needs to urgently implement mechanisms to roll that money out such as Early Contractor Involvement that sees a contractor with proven capacity and expertise in a region engaged early on a fixed cost plus margin basis. This early input helps with planning the project so it can get underway rapidly.

The biggest challenge here will be the officials. We have to learn as a nation to accept that no amount of bureaucratic planning will ensure there are no cock-ups. These happen with, or without, months of reviews, risk and contingency documents and comms plans to use if something awry happens.

Swift, decisive actions and the support of a team of five million got us through the first phase of the pandemic magnificently.

Let's see our economic recovery given the same urgency. Quarries are on standby to help lay the foundations for an early return to economic confidence and growth. **AQA**

Join our united voice!

The **Aggregate and Quarry Association** achieves workable and sensible outcomes for our industry.

Contact us today: office@aqa.org.nz www.aqa.org.nz

Benefits for members include:

- A voice on numerous national committees, including MITO and MinEx
- Access to information and guidance from both our expert Technical and Planning committee members plus our Board members
- AQA members also receive issues of **Contractor** and **Q&M** free of charge.

AGGREGATE & QUARRY ASSOCIATION OF NZ

Supporting New Zealand from the ground up



Minerals Forum is back

The Minerals Forum had been scheduled and then cancelled in late May, but organisers have now booked the Claudelands event centre in Hamilton for October 13 and 14.

Straterra and Inside Resources cooperate to bring together what has now become an annual industry event that started in Queenstown two years ago.

Chris Baker, Straterra's CEO, says the forum provides an opportunity to hear from leaders at the forefront of the themes impacting the minerals sector.

"It's also your chance to support and promote our industry as a positive and valuable contributor through innovation, investment, jobs, taxes and royalties."

He says this year's theme is mining's role in a prosperous, low-emissions economy.

Working in association with AusIMM, the conference includes a gala dinner on the first night to mark achievement in the industry.

These include the Health and Safety Initiative Award sponsored by MinEx for the strongest overall demonstration of excellence in a health and safety initiative by a New Zealand operator in the minerals sector.



While the QuarryNZ conference has been postponed a full year, the New Zealand Minerals Forum is bouncing back in October.

There are also awards marking innovation, community involvement, and environmental management.

Entries closed July 28 with finalists to be announced September 1.

The programme for the Minerals Forum is now being completed and details and registration forms can be viewed at www.mineralsforum.co.nz. **AQA**

Toto loss to quarry industry

A well-respected figure in the quarry industry has passed away.

Shane Toto was an integral part of Stevenson Aggregates' Drury quarry management team and, prior to that, had worked at the company's East Tamaki quarry.

He was regarded by all who knew him as a kind-hearted, caring man who was always approachable, and was gifted with a great sense of humour.

Shane took a particular interest in the next generation and keeping an eye on them as they progressed.

In 2017, Shane was the recipient of the IOQ Auckland Branch Mimico Mentor Award recognising that he was always a strong advocate for quarrying operations health and safety and the go-to person for advice and guidance for many of the staff over some 25 or more years.

When, in the same year, Steve Ellis received the WorkSafe Chief Inspector Extractives Safety Leadership Award, recognising demonstrated commitment to continuous improvement and safety leadership in the area of workplace health and safety, Steve pulled up on stage all his quarry managers including Shane to recognise their efforts.



Shane Toto on stage at QuarryNZ in 2017 with Steve Ellis and his colleagues holding the Safety Leadership Award

Earlier, at the 2007 QuarryNZ Conference Shane was awarded the Gough CAT Award recognising those who have consistently shown the most dedication and commitment to the quarrying industry.

The AQA extend its sympathies to Shane's family for their loss.

M/4 Spec 2020

- AQA is waiting for more information about public training sessions and has given feedback to the NZTA on the flowchart and training notes.
- The training material is being polished now.

NZ Petroleum & Minerals

- The annual production survey is now live at www.nzpam.govt.nz/our-industry/nz-minerals/minerals-data/industry-statistics/
- Please contact us if you have any difficulties with the form. Most quarry sites are pre-populated so there should be less information to enter than usual.
- This information is incredibly useful and important for AQA and we appreciate your time filling it in.

Auckland Transport

- AT has released its 0800 series Specification for Supply of Aggregates, available on its website.
- It contains specs for recycled aggregates and limits of contaminants amongst the basecourse and subbase specs.



On the road to retirement – John Donbavand

NZTA

- After a long association with AQA, NZTA Lead Advisor Pavements John Donbavand retired in July. During his time as National Pavements manager and then Lead Advisor, John pushed for better consistency of basecourse supply through the statistical acceptance regime and oversaw the introduction of ethylene glycol testing, and use of the sand grading exponent on basecourse supply. He was a regular at QuarryNZ conferences. All the best for your retirement John.
- The NZTA will be introducing a technical note on plateau density testing that has been written by Thorsten Froebel from Higgins, and peer reviewed by the National Pavements Technical Group.
- The review of the Pavements Rehab Guide is on hold until a new Lead Advisor Pavements is appointed.

Recycled Aggregates

- AQA continues the work on recycled aggregates, aiming to produce the guidance note in the next few months.
- The association will be briefing MFE on its resource strategy document. [AQA](https://www.aqa.org.nz)

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