

Aggregate & QUARRY ASSOCIATION OF NZ





Jayden Ellis.

Left: A particular highlight of QuarryNZ 2022 was the field trip to see the late Russell Vickers rock collection.

Policies for sustainable progress

Holding a conference this year (and last) amid the ongoing Covid pandemic came with its risks as many of us can attest. That said, the New Plymouth conference delivered real highlights and some scene-setting that demands our ongoing attention.

From our opening keynote speech from Kaipara Quarries MD Steve Riddell, it was clear our industry has come of age. Steve, in a well-researched presentation, simply nailed to the door of (successive) Governments the looming crisis they will face in Auckland with aggregate supply. (see page 53)

As Steve pointed out, expanding Auckland's existing quarries to meet that demand would prove horrendously expensive not to mention framed in consent uncertainty. Both Grant Robertson and Chris Bishop, current and shadow Infrastructure Ministers, had best listen to the message.

Reinforcing that was AQA CEO Wayne Scott who told conference he didn't care which party was in power, what our industry needed was good public policy. Instead, we've got far too much politics and not the necessary focus in delivering on long-term changes and commitments (see page 54). Wayne and the AQA will continue to focus attention not on election-focused politicians but on Government officials and councils where the critical decisions affecting our industry tend to get shaped. He rightly called on us all to extend our own efforts to engage with these people.

Wayne also unveiled the AQA's Sustainability Road Map, which reflects the need for us all to get in front of better environmental, social and corporate governance (see page 55).

For his advocacy, he needs the stories of each quarry as they become more sustainable. The Road Map template is available to every AQA member and comes with the offer to help you get started by assisting with a carbon audit.

Chief Inspector (extractives) Paul Hunt's address to conference was on the new quarrying and alluvial mining regulations which he acknowledged had come with an 'urgency' that was not the same as we apply when we have a machinery breakdown. He made the point that in supporting the new regs, most of us were conscious about how one or two poor performers in health & safety could drag down the reputation of the rest of us. That again reflects the world in which we live and are judged. It was also comforting to hear that WorkSafe would spend its energies over the next year on educating our sector, not enforcing the new regulations.

I particularly enjoyed the thoughtprovoking address from Shane Braddy, president of IOQ Australia. He's picked up on rebranding our industry, away from the use of the word 'extractives' which can reinforce negative connotations.

His suggestion is we brand quarries as the Essential Construction Materials sector.

That should provide some good smoko and board room discussion before we meet next year in Christchurch just a few months short of the General Election.

In the interim let's see some progress on becoming a more sustainable industry – while we continue advocating for policies that allow us to deliver those materials.

Jayden Ellis Chair, AQA

Blunt messages on looming aggregate crisis

A blunt message of Auckland facing a looming aggregate supply crisis was among several delivered by the keynote speaker at the QuarryNZ conference in New Plymouth last month.

Steve Riddell, managing director of Kaipara Quarries, didn't pull any punches in his address, taking aim at councils' management for inefficient processing of resource consents with costs having increased 70 percent since 2014 and the average time taken for a consent by 50 percent. He says these delays and uncertainty of consent outcomes have had a significant impact on the availability of aggregates in Auckland for key projects.

In addition, he says New Zealand appears to have lost the ability to build and maintain roads to appropriate standards. There were several examples of major roading projects being late in their delivery and incurring substantial budget blowouts, with Transmission Gully the most recent. Ultimately, he says the management of Waka Kotahi is accountable for a project's delivery in a timely manner and within budget while the board of Waka Kotahi is responsible for it. He says as the principal of a project you cannot abdicate your responsibility for its delivery.

The former West Coaster started his address by noting the number of construction cranes on the Auckland skyline, emblematic of some \$85 billion in infrastructure spending required in the region in the next 20 years.

Auckland, already importing one truckload in six of the quarried materials it needs for infrastructure and housing requirements, was likely to see many more delivery trucks coming into the region within a decade.

Steve Riddell says Kaipara's Brookby operation was one of Auckland's big three sites which collectively produced more than 80 percent of the region's 11.1 million tonnes of aggregate last year.

But Auckland used 13.3 million tonnes meaning it was currently importing 2.2 million tonnes of aggregate – most from Waikato – to supplement local production.

He quoted Statistics NZ data which projects Auckland's population could grow to its high-end forecast of 2.5 million residents by 2033. This, combined with tens of billions in infrastructure spending, could see the region's aggregate needs double – and most might have to be imported from around New Zealand.

He says there is no shortage of aggregate within Auckland but the cost and time of getting resource consents have ballooned out of control. It had taken seven years for Kaipara's existing Brookby quarry in south Auckland to get approval just to apply for a resource consent to expand its operations.

For the Brookby quarry to double its current production of 2.7 million-2.8 million tonnes a year would require capital



Steve Riddell.

expenditure of \$112 million and \$45-40 million of operating costs, as well as finding another 65 staff when already getting people was extremely challenging. Such an extension would take at least three, or more likely, five years.

Developing a greenfields quarry within Auckland region for Kaipara would take 10 years and bring a projected \$250 million capital cost, with operating costs of \$70-80 million a year. He was unaware of any new quarry being developed in Auckland for many years but several major production sites had closed, with imported materials partly meeting the deficit.

He says other regions face similar challenges. Kaipara's Smythes quarry near Maramarua in Waikato last year quoted to supply \$280,000 worth of aggregate for Transmission Gully because of Wellington shortages; the trucking cost was more than three times as much – \$890,000. (The supply did not proceed.)

Steve Riddell says he could list seven major roading projects in a row where costs and timeframes had blown out.

It was imperative Waka Kotahi, the Infrastructure Commission and quarry producers worked collaboratively to ensure aggregates for major projects were available for all major infrastructure projects. AQA

Politics vs policy

People in the quarry industry need to understand the difference between politics and policy and most things don't really change that much when either one of the major parties leads in Government.

In a confronting address to the QuarryNZ conference, AQA CEO Wayne Scott says politicians often played politics when sometimes necessary policy changes were rolled out.

He cited the current Government's Three Waters Reforms which included Maori co-governance of water assets. The politics saw claims of this being a separatist, racist policy.

Wayne Scott says co-governance dealt with commitments over 200 years made to iwi by successive governments and not kept. There were good examples of co-governance, some operating for many years, such as that for Auckland's Bastion Point. Former National Government Minister Chris Finlayson had written a good book supporting co-governance.

Wayne Scott says the politics of Three Waters suggested the Government was grabbing assets and councils were losing control to another bureaucracy with disproportionate representation.

The governance model had been changed in response to community feedback and the reality was most councils could not afford to maintain drinking water, storm water and wastewater assets.

He lives in Wellington where leaks represent one-third of its water consumption. There were councils trying to deal with such issues with 600 or 6000 ratepayers and rationalisation was needed.

"You can't have 78 councils in a population of five million." Wayne grew up in Pukekohe with tainted drinking water that persisted until very recently, within our biggest city.

Good water infrastructure was a long-term policy issue requiring rationalisation but the current Government was trying to do everything at once. It's reforms of vocational education, which again were needed, saw lead agency Te Pukenga with 164 staff but no operating model and its CEO on leave.

Wayne Scott says unfortunately politicians of all persuasions spent much of their time getting elected or re-elected. The



Wayne Scott.

previous Key Government only seemed to have one policy goal in each of its three terms – "at least they got it done."

On taking office in 2017, new Prime Minister Jacinda Ardern declared there'd be no new mines on conservation land. It had not been Labour policy and there has been little progress since. Quarries and mines already exist in national parks under policies and rules which benefitted everyone, including conservation.

"You've got to ask, what's the issue she is trying to fix?"

"What we need is good public policy. I couldn't give a rats ... about who's sitting in the chair."

He says policy fundamentals across environmental protection, climate change and social issues were unlikely to change much through the next election, which under MMP was very likely to be a National or Labour-led government, supported by minor parties.

The AQA and quarry sector had to remain strongly focused on advocating on policy issues including wetlands, indigenous bio-diversity and the Infrastructure Commission's strategy. Much of its engagement was with Government officials who thought Wellington is the real world.

"They live in a void."

Quarries should take every opportunity to get officials, councils and MPs on their sites as often as possible to demonstrate the realities of what they did and how much they contribute, says Wayne. AQA





Road Map to sustainability for quarries

Recognising the changing world we all live in, the AQA launched a sustainability Road Map at QuarryNZ for the quarry sector to use, with the offer to help companies to implement it.

AQA CEO Wayne Scott says the Road Map covers all ESG issues – Environmental, Social and corporate Governance, in short, how to operate a sustainable business.

"We think of it as understanding, measuring and reporting on our material impacts, positive and negative, on people and the environment."

Wayne says the difference between ESG and other buzz words like "triple bottom line" and "corporate social responsibility" is that ESG is not voluntary.

"It's what's increasingly expected of businesses nowadays, especially businesses that use resources and land."

Fletcher's (which includes Winstone Aggregates) has a 6-point approach to sustainability; Fulton Hogan, Ravensdown and Holcim are also on board.

"For me, the Road Map is going to be a vital engagement tool when I'm talking to officials and politicians, the people who are making the decisions about how we operate," he says. "I want to be able to tell a story about our sector, and to do that, I need to have a story to tell – that's where you come in.

"By measuring or describing your material impacts on people and the environment, and how you manage them, you are telling a story about who you are, and what you stand for."

The Road Map provides a guide to quarry companies to refresh their sustainability strategy or create one. For each material topic, the Road Map outlines the issue, actions for operators and matters for government (and local councils) to consider.

"It's all the stuff you'd expect and they are all touchpoints for government and the communities in which we live and work."

The first step is a baseline energy and CO2 emissions audit.

"That will help you bid for Waka Kotahi contracts or subcontracts; they are now increasingly weighing sustainability as a factor in roading procurement."

The same approach is taken with workplace health and safety and all the other material impacts quarrying has on communities.

A good first step is to show your Road Map to local iwi, communities in which you operate, and customers.

"You can lead with your chin every time iwi engagement gets harder, or when it's tough recruiting people, or when people oppose your new quarry."

Or, says Wayne, you can get ahead of the game on how you position your company in today's world – with AQA's help. From its launch of the Road Map at QuarryNZ, AQA is offering to assist members to create a carbon footprint audit for their company.

"You give us your annual consumption of electricity, diesel, petrol, any LPG or gas, talk to us about how your company uses energy."

You will then receive a short report detailing your CO2 emissions, broken down across the energy streams. The rest is then up to you.

"That immediately focuses you on where you could improve. The Government will love you for it, and it won't matter whether it's this Government or a change of Government, none of this stuff is going away."

https://aqa.org.nz/road-map-for-the-aotearoa-new-zealandquarry-sector/ **AQA**

Education before fair enforcement of new regs

WorkSafe's Chief Inspector for extractives has reassured operators the new quarry regulations will be fairly enforced after a substantial effort to explain them, including extended site visits.

"We will be a fair and reasonable regulator. That's a commitment from me," Paul Hunt told the QuarryNZ conference

He says WorkSafe would take every single opportunity to engage with quarries to outline the regulations for the next one or two years at least.

WorkSafe was already in the process of rolling out the regulations up and down the country ahead of the first phase implementation on July 18, including a series of workshops held with IOQNZ.

Inspectors were also meeting almost every week to ensure they understood the regulations as well as possible. MBIE, not WorkSafe, had drafted the regulations.

"The words are new to us as well and more than anything we want transparency and consistency."

WorkSafe was still getting questions it didn't immediately know the answer to and would continue to develop further guidance.

As part of the regulation implementation plan, inspection schedules would change.

Paul Hunt says WorkSafe wants more time on sites to assist managers and operators with their understanding of the requirements.

"We intend to head to the largest most complex quarries first – about 150 we have identified and conduct regulatory compliance-based inspections."

These were a gap analysis of where quarries sat against the new regulations and where they should be in 2025 when the final changes come into effect.

"We think these types of visits will be useful and we will be happy to share our "regulatory compliance assessment tool" for operators to do self-assessments."

He says it was reassuring most operators supported all quarries being in the regulations to improve site health and safety.

Generally, they felt they were already running good operations and regulations would help with consistency of safe work practices across all sites.

"And the industry realised that one or two operators could quickly damage the industry reputation and erode the social license to operate," says Hunt.

He says the wish for proportionate regulations saw that quarries would either fall in or out of the principal hazard



WorkSafe will work with quarries to see the new regulations implemented Chief Inspector (extractives) Paul Hunt told the QuarryNZ conference.

regime based on size.

Personally, he didn't think this was the key change, rather the requirement for all quarries to develop a more prescribed H&S management system and describe the processes used to identify and control hazards.

"The H&S management system can be set out at a level of detail commensurate with the nature, size and complexity of the operation," he says. "It has to be effective but it doesn't have to be War & Peace."

"There are good time frames for operators to get the work completed and we think that with our assistance operators can comply with all the new requirements on time." AQA

AQA Technical update

M/4 Specification

The M/4 working group (11 people from Waka Kotahi, AQA and industry) has had its first meeting in Napier. Next meeting is end of August. This is a positive move from Waka Kotahi to engage with industry on greater use of local aggregates and developing fit for purpose specifications around locally available aggregates.

Production Data

AQA has had a request from New Zealand Petroleum & Minerals (NZP&M) to encourage members to report their production data for 2021. This can be done online in a matter of minutes and there is a bulk form for producers with more than a couple of quarries.www.nzpam.govt.nz/nz-industry/ nzminerals/minerals-statistics/industry-statistics/ . You are welcome to contact AQA Technical Adviser Mike Chilton tech@aqa.org.nz - if you need help with completing this form.

These NZP&M aggregate statistics are our industry's best national production data. The stats are particularly helpful as AQA encourages local authorities to plan for their aggregate supply futures and to help them recognise the need for aggregate when processing resource consents for quarries.

Hi-Lab Aggregate Information Note

AQA's Technical Committee has prepared an information note for Hi-Lab aggregate suppliers. This will be available to members on the AQA website shortly.

Aggregates for Asphalt Information Note

This information note is being developed by the Technical Committee to highlight the consistency required in producing asphalt aggregates and the downstream effects of any changes to the asphalt mix. AQA plans to publish and disseminate this information in the next couple of months.

Waka Kotahi Rehabilitation Guide

The Rehab Guide is currently under review, in several workstreams, with the update expected to be delivered in March 2023. Currently the pause on using cement-modified basecourse in greenfield projects doesn't apply to rehab work in the Network Outcomes Contracts (NOC) contracts with Waka Kotahi (e.g. overlay with cement hoed in).

Hydrated Lime Replacements for Asphalt

Austroads has recently issued a tender for research into the feasibility of using antistripping additives as an alternate to hydrated lime in asphalt mixes. The research extends to the status of hydrated lime supply in Australia and New Zealand. This may influence asphalt mix components in the future, depending on the outcomes of the research.

• Technical Update is compiled by AQA Technical Adviser Mike Chilton. He also took the AQA photos at QuarryNZ 2022. AQA

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