



A briefing on the quarry sector and aggregate supply

October 2018

INTRODUCTION

The Aggregate and Quarry Association (AQA) is the industry body representing construction material companies which produce around 85% of the estimated 45 million tonnes of aggregate and quarried materials consumed in New Zealand each year.

These form the foundation of every building and every road, with government, councils and construction industries the primary clients. Ensuring a localised and ready flow of these materials is a critical factor in maintaining economic growth and wellbeing for every New Zealander.

Current supplies of aggregate are under pressure amid looming shortages, which contributed to a 15% rise in the price of aggregates in 2017. This feeds into the cost of every building and road.

Funded by its members, the AQA has a mandate to increase understanding of the need for aggregates by New Zealanders, support its members on planning and regulatory issues, improve our industry and users' technical knowledge of aggregates and assist in developing a highly-skilled workforce within a safe and sustainable work environment.

AQA has recently elected a new chair, and appointed a new CEO, and now seeks early engagement with Ministers, government agencies and officials to discuss the need for new policy settings to ensure ongoing aggregate supply and operational requirements.

Our goal is to create an enduring industry which provides for our communities responsibly, because we believe:

“Sourcing aggregate locally, safely, at reasonable cost and in environmentally sustainable ways is fundamental to New Zealand’s future.”

BACKGROUND

Currently an average of around nine tonnes (one rigid truckload) of stone, gravel and sand per New Zealander is required each year to meet New Zealand's ongoing infrastructure demand. With our population set to rise to between 5.3 and 7.9 million by 2060 this increase in population alone will require approximately 1.2 million new homes to be built over the next 40 years. That is 30,000 new homes every year.

Central and local government will need to invest an unprecedented amount of money into infrastructure, such as schools, hospitals, roads and transport, to meet this population growth. The New Zealand Government relies heavily on locally-sourced aggregate resources

for infrastructure repair following disasters, for road and rail transport corridors, major projects and for housing development, all of which are essential for the social, economic and cultural wellbeing of communities.

New Zealand needs to secure supply of our quarry materials to provide affordable housing and infrastructure now and for future generations. In order to do this, it is critical that planning is streamlined, quarry resources are protected so they can supply vital construction materials and quarry land is returned as an asset to the community once extraction is complete.



SNAPSHOT OF THE NEW ZEALAND QUARRYING SECTOR

Every built thing sits on aggregate (crushed rock and stone) sourced from quarries or riverbeds; not a single home, factory, farm building, school, hospital, airport or road can be built without aggregate. This is sourced from as many as 1,200 quarries and crushing sites which are located from Te Hapua to Bluff. In 2017, New Zealand Petroleum and Minerals (NZP&M) recorded 41 million tonnes of produced aggregates including limestone and other products. Approximately 85% of all quarries reported to NZP&M, therefore the total tonnage will actually be higher. The direct revenue earned from this reported tonnage was \$670 million and the indirect economic benefit of quarrying for New Zealand (direct, indirect, and induced) was \$2.8 billion.

The industry has played a significant role in the Christchurch rebuild, the Kaikōura rebuild and the construction of new infrastructure and buildings. We

will continue to support the Government's housing objectives, infrastructure improvements and regional development initiatives. However, it is critical that additional constraints placed on industry do not put unnecessary pressure on cost, supply of aggregates in a timely manner, and future ability to supply the needs of local and central government and the community.

A wide range of industrial minerals are produced in New Zealand, including clay, limestone, perlite, halloysite, bentonite, zeolite, silica, dolomite and serpentine.

A particular challenge faced by the quarry sector and end-users is maintaining urban and urban-fringe quarries. As quarries are forced to locate further from their markets, the cost of aggregate rapidly increases, additional pressure is put on traffic congestion and transport emissions increase.



AQA'S RECOMMENDATIONS ON ISSUES CONFRONTING THE SECTOR

Continuity of supply from existing quarries

An important issue for quarries operating in areas of expanding residential growth is reverse sensitivity – people complaining about quarries after moving into an existing quarrying area. This has the potential to sterilise existing and future resources which mean increased costs for more remotely sourced aggregate and lost opportunities for the local economy. Public sector revenue (through ownership of Crown mineral rights) is also at stake.

Currently, the cost of a tonne of aggregate doubles when it has to travel 30 kilometres from a quarry, with additional costs for each extra kilometre thereafter. By ensuring quarries are close to their markets, transport costs, transport congestion and carbon emissions are significantly reduced.

We would like central government to give local authorities greater direction in planning for key resource areas, in order to protect existing quarries from encroachment of non-compatible land uses such as housing and reduce reverse sensitivity potential. The sector is happy to assist government in identification of these key resource areas.

Security of supply from future quarries

Adequate provision must be made in planning documents to recognise existing and potential aggregate and sand deposits and provide for their extraction. Quarry materials are not universally available and can only be sourced from where they are located; without planning to provide for adequate access to resources at workable locations, there is the real risk of losing access to such proximate resources.

Quarries fully expect to have stringent environmental and resource requirements put in place for new or renewed consents, however quarries sometimes sit idle due to fluctuations in demand such as in post-disaster situations. To ensure the continuity of supply of aggregate, planning rules need to allow for fluctuating demands and periods of quarry inactivity. This will create an enduring industry which can respond quickly and appropriately to changes in market conditions.

Of genuine concern to the AQA is the Government's policy of 'No New Mines on Conservation Land'. While unclear how this policy will apply to quarries, any sterilisation of available quarry resources will impact heavily on regional communities in terms of jobs, availability and cost of aggregates and sand. We note that the Department of Conservation (DOC) was recently granted resource consent to extract rock and gravel from conservation land adjoining the Waiho River near Franz Josef Glacier to help protect its walking track. This sensible and pragmatic decision saved DOC a fourfold amount – and considerable carbon emissions – from the alternative of trucking material a long distance.

The average cost of aggregates in 2017 was \$16.23 per tonne, up \$1.53 per tonne (15%) on 2016 figures. This reflects increased demand and the need to source aggregates from sites further away from the market. Prices will continue to rise if valuable resources are sterilised through the unintended consequences of government policy.

Impacts of the Land Transport Management (Regional Fuel Tax) Amendment Bill

The implementation of this Bill in July has had immediate and significant impact on quarrying operations in the Auckland region. Quarries have no choice but to pass these additional costs onto consumers, putting added pressure on the affordability of housing and cost of infrastructure works.

Auckland is not the only region expected to implement this tax, with at least fourteen additional councils considering adopting a regional fuel tax, despite a lack of analysis of the economic impacts it will have on regions outside of Auckland. If applied, costs will be compounded as all quarry, earthmoving, roading and construction vehicles may be subject to the tax.

There is also the potential for fuel companies to spread the additional cost of the fuel tax across the country.



Impacts of the review of the Waste Minimisation Act 2008

AQA supports the intent of the Waste Minimisation Act; to protect the environment from harm and provide environmental, social, economic and cultural benefits. We are however concerned that current recommendations to apply waste disposal levies across additional classes of landfill will include levies on clean fill and managed fill.

Clean fills and managed fills are made up of inert materials such as concrete, soil and rock which do not harm people or the environment. If clean fill and/or managed fill were to be levied, there will be no incentive to separate clean and managed fill material from other materials and remediate them back into the land.

As a part of any national strategy, it would also be appropriate to introduce material exceptions to any levies on materials used for rehabilitation, such as cover material, which the Christchurch City Council defines as “*uncontaminated topsoil used for clean fill cover.*” Imposing levies on part of the rehabilitation process to clean fills and managed fills would discourage their use over more wasteful options due to increased costs. Clear definitions on filling versus rehabilitation will help differentiate products at a nationally accepted level.

The AQA seeks to consult with the government prior to the introduction of changes to the Waste Minimisation Act to ensure officials are adequately informed on the cost and practical impacts for little or no improvements to the environment.



Photo: Halswell Quarry in Christchurch

Reduce the environmental impacts of quarrying and deliver landscapes for the community

The quarry industry currently works collaboratively with local communities and councils to reduce our environmental impact and meet legal requirements of environmentally sustainable operations.

Opportunities exist in the use of aggregates for public transport facilities and better insulated homes to conserve electricity, recycled products, and in the future, use of electric vehicles. Technological advances have improved the management of dust and noise impacts on workers and adjoining communities.

We support the Government’s ambition to reduce greenhouse gas emissions.

We will work with government and the community to find innovative ways to return former quarries to communities as lasting assets – examples are productive wine growing land in Marlborough, Halswell Quarry in Christchurch, Mount Smart Stadium and the Three Kings housing development in Auckland. Post-quarrying land uses can enhance amenity and lifestyle for local communities and also provide habitat for threatened species (an example is The Isaac Conservation and Wildlife Trust in Christchurch).



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