SUBMISSION ON THE DISCUSSION DOCUMENT REDUCING WASTE: A MORE EFFECTIVE LANDFILL LEVY

February 2020

Introduction

The Aggregate and Quarry Association (AQA) is the industry body representing Construction Material companies which produce an estimated 45 million tonnes of aggregate and quarried materials consumed in New Zealand each year.

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

Background

Accessing, extracting, processing and transporting aggregate (crushed rock, gravel and sand) is needed for the construction of infrastructure in New Zealand. It is essential that there is enough supply of aggregates to provide the infrastructure and buildings that the country needs. Since aggregates are a finite natural resource, and can only be quarried where they are found, best use needs to be made of them to secure long-term conservation.

We acknowledge the importance of the circular economy in the aggregates sector and generally, maximising the use and reuse of the same resources for as long as possible. However, while increased recycling and resource efficiency will have some impact, the technology is nowhere near ready to fully replace the need for extraction of natural aggregates.

Currently there is little incentive for recycling and re-use due to the cost of processing these products relative to natural products and the reluctance of customers to specify and/or allow the use of recycled products. These customers include central and local government who are both significant users of aggregates and sand.

We make the following submission in relation to the consultation document 'Reducing Wastes - A more effective landfill levy.'

The need for change

We agree that there is a need to reduce waste and that the relatively low cost of disposal to landfill and the higher cost of recovering and recycling materials leads to products that could be recycled being taken to landfill.

We support increasing the waste levies and applying them progressively to other classes of waste, provided that such levies do not de-incentivise the separation of waste from controlled, managed and clean fills. We also support the landfill levy being progressively increased to higher rates in the future (beyond 2023).

Our sector is a large user of controlled fills, managed fills and clean fills for rehabilitation and reuse as an additive to lower grade products. Getting the price levers right will help encourage the shift to more recycling but will also encourage those generating the waste to separate waste from controlled fills, managed fills and clean fills, thus potentially providing additional material for use by the extractives sector.

We also agree that there is significant room for improvement in the data that is collected on waste. Better waste data will make it easier to identify opportunities and assess the effectiveness of waste minimisation measures. It will also allow all sectors to better prioritise, plan and execute activities to reduce waste.

Potential for increased recycling of Construction and Demolition Waste

Crushed aggregate from demolition concrete can be re-cycled and used as an alternative to coarse aggregate for use in new concrete products, roading or drainage materials.

In the case of concrete only coarse recycled aggregate is used as the fine aggregate has a significantly higher water demand. This leads to a demand/production imbalance at the recycling operation. The coarse recycled aggregate will also push up water demand inevitably increasing the cement demand. Typically, the increase in cost doesn't make recycled aggregate in concrete an attractive option.

In roading materials recycled aggregate typically needs to be blended with raw coarse aggregate as it is difficult to know the properties of recovered material and a high percentage of recycled aggregate can negatively affect the performance of the product. As with fresh aggregate, the high cost of cartage (both gathering material as well as distributing products) and the need for a reliable source of recovered material at a consistent quality affect the economic feasibility of recycling materials. It seems very unlikely that recycled aggregate could substitute for more than a fraction of the range of materials available from newly quarried material.

Using the data provided in Table 15 on page 73 of the discussion document, we have estimated that 874,122 tonnes of concrete, bricks, rubble and landscape materials may be available for recycling into replacement aggregate products. If financially viable to do so, this would produce 786,700 tonnes of aggregate or fill products, or 2 percent of the existing national aggregates market. This is consistent with Auckland Transport's assessment that recycled construction waste available would not exceed 2% of demand.

A cost/benefit analysis for recycling and re-use of construction waste needs to be conducted by Government in consultation with industry, in order to establish the types of incentives, and/or penalties needed to achieve positive outcomes from the principle of a circular economy.

There is also a need to consider options to ensure appropriate infrastructure is in place to allow for greater recycling and re-use given that lacking appropriate infrastructure, expanding the levy to a wider set of landfills, together with any levy increase, will likely add cost but with no meaningful impact on the amount of waste going to landfill.

Levy Proposals

We currently pursue opportunities for reuse of materials including onsite use of lightly contaminated soils on development sites or roading projects and use of rubble as an alternative to quarried materials, within the constraints referred to above.

The quarry sector do not see themselves as landfill or waste receival operators, but rather earth movers using managed fills, controlled fills or clean fills for a relatively short period of time to rehabilitate quarry sites as required under Resource Consent.

We do not believe levies should be applied to managed and controlled fill sites used by quarry operators for site remediation (e.g. filling in a quarry after it ceases operation), reuse in aggregate products, or use in engineered contours as part of site development. We support measures to ensure that these sites are only accepting materials that can be reused or used in rehabilitation and not materials that should be disposed of in a levied landfill.

Many quarry sites are small, unmanned for periods, and have no effective means of measuring the fill they are receiving (no weighbridge). To apply levies to such sites would be administratively complex and not result in any reduction in the generation of waste.

It is reasonable that quarry landfills that charge to receive managed or controlled fills should be levied at the rates applied to these classes of fill.

Setting Levy Rates

We support the proposed rate for municipal (class 1) landfills of $60.00 per tonne.

Levy rates applied need to be high enough to change behaviour and divert waste from landfills, and make alternatives such as recycling, composting and reuse more competitive. We therefore support differential levy rates for different classes of landfill to support those facilities that are reusing material and incentivise the generators of waste to find alternatives to dumping.

Quarries receiving controlled, managed or clean fills for site remediation, reuse in aggregate products, or use in engineered contours as part of site development should be exempt from the proposed levies.

Implementation

We support the phasing in of changes to the levy and prefer Option B which would raise the costs for all landfill operators thus eliminating the potential risk of greater diversion from municipal landfills to non-levied landfills in the first year.

It should also ensure a swifter change in behaviour, particularly around finding alternative uses for waste products that can be reused.

Levy Investment Plan

We support the development of a Levy Investment Plan.

A key principle underpinning the plan must be the monitoring and enforcement of the levy, including measures to combat inappropriate forms of disposal (littering, fly tipping, illegal dumping). We are aware of existing illegal dumping of waste to cleanfill and there is a real risk of this increasing with the higher levies. There has been inconsistent compliance monitoring and action across jurisdictions which has led to an "uneven playing field" for operators who comply with waste management regulations, having to compete with those operators who do not comply with regulations and who do not attract any compliance action.

We also believe the allocation of waste levy funds should be at arm's length from both the Government and MfE officials and instead be overseen by the major levy payers and by private sector personnel with expertise in waste management issues. This would avoid the risk of funding being siphoned off to favoured political projects.

Data Proposals

We do not have accurate data on construction waste in New Zealand and general statements of the scale of construction waste mask weaknesses in understanding of the composition of the total waste stream. Such perceptions are simplifying what is ultimately a complex situation. More consistent and comprehensive data collection and monitoring of waste streams and resource use is needed.

The aggregates sector is happy to work with Government, the waste sector and local government to develop a nationally consistent record of all waste disposal facilities in New Zealand. We can be of particular assistance where facilities are not consented (e.g. cleanfills (class 5) are often permitted activities) and/or are already operating.

Many quarry sites are small, unmanned for periods, and have no effective means of measuring the fill they are receiving (no weighbridge) or in some cases identifying the source of the cleanfill. It is critical therefore that the collection of waste quantity data is simple for small and remote sites, as compliance will be affected if sites find collection and reporting of the data too complex and/or time consuming.