

Austen Bell  
Three Kings United Group Inc.  
2/15 Queensway, Three Kings,  
Auckland 1024.  
Ph (09)6236642 or (09) 6259664

RESOURCE CONSENT APPLICATIONS MADE PURSUANT TO RESOURCE  
MANAGEMENT ACT 1991 SECTION 88 FROM WINSTONE AGGREGATES  
LIMITED – JOINT ARC/ACC HEARING OCTOBER/NOVEMBER 2009  
Consent Numbers 36221 and 36222

Submissions from Three Kings United Group Incorporated and Austen Bell

As a concerned member of the Three Kings United Group Inc (Neighbourhood Environment Society) and a local resident of 20 years living near the Three Kings Quarry I wish to speak on some serious environmental issues that have been raised in our submission.

**1. The scale of the project is incompatible with our neighbourhood environmental values and quality**

1.1 This is an unprecedented industrial project that will seriously impact on our neighbourhood, a wonderful residential suburb in the centre of our city. The demographics have changed considerably since 1985, influenced by infill housing, young families have moved in over the years to become the dominant grouping, school rolls have grown with a preponderance of young children attending the Three Kings Primary School from the surrounding homes, the Carlson Palsy School, St. Therese School, Mt. Roskill Primary School, Mt. Roskill Intermediate School, Mt. Roskill Grammar School, Marcellin College and Monte Cecilia School. Almost on the western boundary of the Three Kings Quarry is Sunnyside School situated in Smallfield Rd, a special needs school doing splendid work for the community helping autistic and intellectually impaired children. On the corner of Mt. Albert Rd/Mt. Eden Rd/Warren Ave intersection is a well-known institution known as the Ranfurly War Veterans home where many veterans reside, enjoying the care, peace, and quiet amenities offered by the home. The surrounding parkland, Rowan Park Three Kings sportsfields, Monte Cecilia Park, Three Kings Reserves, Robinson Park and the Big King Reserve, are enjoyed immensely and used frequently by the community.

1.2 The large air shed (dust) generated by the filling operation being superfine will unfortunately pollute many of the above institutions and surrounding homes adding to the rogue dust pollution generated by the current quarry operation. This is a huge project! The proposal is unprecedented for a prime inner city suburb. Approval is sought to fill a quarry pit of some 15

hectares, millions, and millions of tons of spoil will be required to fill the quarry void, the filling operation, trucking bulldozing, leveling, cannot avoid generating great volumes of dust. This raises serious nuisance and health issues particularly when there is no Health Assessment Impact report. One would think that we were dealing with a rural quarry requirement. An urban quarry situation deserves the most rigorous assessment and standards. We do have people living beside and around the quarry. Unfortunately past councils working under the old Town Planning Act, somehow over looked the necessity to establish a buffer zone, where today's minimum requirement is 500 metres. The proposed filling operation is more than minor; it is not merely a quarrying cosmetic task, it is a massive undertaking.

**2. Continued hard fill/clean fill/managed infill, or structured filling of obsolete quarries or pits requires urgent rectification.**

2.1 Further, the applicant for the resource consents, Winstone Aggregates, to fill the quarry, should urgently carry out an AEE Health Study on the effects of superfine fill dust on the surrounding residents, particularly on particles PM 10 down to 2.5 microns. I am sure the Ministry for Health would co-operate with the applicant as they did with the Newmont Mining Co in establishing Air Emission Standards at Waihi to the satisfaction of the surrounding residents, especially as the applicant requests a 35-year term for its resource consents. Surely the firm can wait until the new city formulates its ordinances and a spatial plan that has high natural and landscape values.

**3. Double dust pollution, an urban quarry problem**

3.1 As a resident for 20 years living in Queensway some 350 metres from the Three Kings Quarry, I can only report that the dust nuisance has steadily increased over the last 10 years. Surprisingly, during the last 3 winters, there has been no let up on dust pollution despite the installation of new dust monitoring equipment on the quarry site. Unfortunately all quarries are natural dust generators. Monitoring, as precise as it is these days, only gives you the base line levels of TSP. The dominant westerly winds, particularly the SW winds, hit the quarry face and eddy down into the pit creating a great vortex of dust that rises high above the Three Kings Quarry, the bulk of the dust missing the monitoring equipment.

3.2 As a builder developer I have found a red scoracious dust floating on a swimming pool situated on a St. Andrews Rd escarpment site facing the quarry. At another home in Ferryhill Rd one section of the spouting was half full of reddish scoria dust. A dust test done by the ESR laboratory on a weather board house at No 13 Queensway, Three Kings, showed the presence of quartz dust, and found quartz inclusions in scoria deposits on the floor of the quarry without much effort. Note copy of ESR report. Quartz dust is one of the most feared dusts by quarry workers and miner causing bronchial problems such as silicosis or worse.

3.3 Now the residents have the added concern of increased dust pollution

from the filling operation proposed at the southern end of Three Kings Quarry. Dust from clays, soils, volcanic tuff, crushed concrete, and volcanic clays can be extremely fine below PM10 down to 2.5 microns, and inhalable. Further these dusts can carry a variety of nasties such as fibrous minerals particularly in volcanic clays, tetanus spores and leptospirosis bacterium. So after some 80 years of quarrying activities and its adverse effects on the neighbourhood, we are going to suffer a double whammy, a double cocktail of dust pollution. It makes you wonder if the experts and officers who wrote the reports have any idea of the dust pollution at Three Kings and beyond. Did they visit the site, did they carry out a social survey and meet with the inhabitants? The EPA (Environmental Protection Association, USA) some 20 years ago, advised all urban authorities to close suburban quarries as quickly as possible owing to the risk to human health and its adverse effects. This double dust pollution and urban quarry problem is an anomaly and requires urgent and rigorous standards to minimise the risk to public health, should the resource consents be approved.

3.4 To deal with the dust emissions from two separate activities we request that the current Air Emission Management Plan be cancelled and that an Air Emission Management Plan be formulated, with at least 3 mini samplers to be installed, two to measure respectively 0 to 2.5 and 0 to 10 micron particle size, and the third to measure TSP particles, with urban max set at 50 microns in accordance with standard methodologies, silica content to be determined by x ray diffraction. The equipment to be approved by the Ministry of Health.

#### **4. Dewatering, subsidence and insurance risk**

4.1 Quarrying at one end of the quarry and filling at the southern end, and the dewatering operation are inextricably entwined. Both operations require the current water level to be held at 34 metres RSL to facilitate fill compaction and the extraction of minerals at the northern end. Unfortunately the dewatering resource consent allows groundwater to be extracted from the Three Kings Aquifer at a rate up to 7500 cu.metres per day (52,500 metric tonnes per week). I understand the current rate of abstraction is running at 3000 cu.metres per day (21,000 metric tonnes per week).

4.2 And at this point if you look at the map showing the dewatering zone of influence you will see the affected residential area of 8 to 10 sq.kms which encompasses 10,000 properties excluding the latest infill housing, at risk from potential subsidence, and loss of EQC cover and private insurance cover (see attached copy of email confirmation of the loss of EQC rights when man-made subsidence affects property in the dewatering zone of influence). Here is the point of conflict: residential rights verses mining operations in the heart of a prime city suburb. Subsidence unfortunately is happening within the dewatering zone. Just note the streets showing subsidence - see graphs attached. Sight the photos of a 70-year old ex-state house, brick and tile construction with structural cracks in the bedroom lintel and base (attached).

I have had requests from eight other properties to examine suspected subsidence damage, and on inspection I have found cracked doorway lintels, sunkens lawns, and cracked concrete floors.

4.3 As a builder developer of 40 years' experience there is no doubt in my mind that the damage is caused by subsidence. Sadly the owners are fearful of seeking damages and admitting their property is subsiding. They are absolutely petrified of devaluing their property. This makes a mockery of the compensation scheme developed by the ARC as a condition of the dewatering resource consent. Further residents living or purchasing in the dewatering zone are given no indication by the ACC of the risk of subsidence in the dewatering zone; nothing on the LIM report or notified by the Council that they are living in a dewatering subsidence zone. This is a disgraceful state of affairs, the dewatering operation is negligent and reckless. The residents are entitled to the same insurance rights as other Aucklanders and to deny them this security over their property and mortgages is inequitable.

4.4 Further to dewatering, subsidence and insurance matters, we request your urgent consideration to review the dewatering resource consent, and the compensation and bond issues, before granting a new resource consent to fill the quarry. This is because the filling proposal is inextricably entwined with the total quarry operational plan. Note carefully our submission on this matter particularly the reference to the NSW Mining Act and its benefit to the mining companies, council infrastructure, and private property security.

## **5. Contamination of the aquifer**

5.1 Not to be overlooked or forgotten is the Three Kings Aquifer, an important link in Aucklands aquifer system being the spring head for Oakley Creek, Meola Creek, Western Springs and the Maungakiekie Aquifer (Onehunga Springs Water Supply), all proven to be linked, and a important emergency water supply for the city in the event of catastrophic failure of the Waikato water system.

5.2 The Three Kings Aquifer as a well-head for an extensive ecological system should be protected at all costs. The proposed infill, even with traces of heavy metals, will do irreparable damage to a pristine water supply. Further diluted pesticides and herbicides are more dangerous than the concentrated form. Complex organochlorides are more resistant to breaking down therefore tend to persist in the environment. (Ref. "The Poisoning of New Zealand" by Merial Watts.) Altrazine in England's aquifers with concentrations as low as 0.1ppb has strong negative effects on total abundance of several species of insects, and it has been implicated in non-Hodgkin's lymphoma.

5.3 It is essential to line the quarry pit with clay, then install a heavy duty impermeable membrane with a life of at least 50 years to create a buffer zone to protect the vulnerable aquifer from toxic contaminants percolating through the porous scoria

strata. The proposed Resource Consent condition No 1 should specifically order the applicant to line the quarry to best international standards with suitable lining material and install with best practice methods.

## **6. Three Kings Cone and Tuff Ring, World Heritage prospect**

6.1 The Department of Conservation confirmed in July that the Big King Cone and the surrounding tuff ring are on the tentative list and itemised on the list of Auckland volcanic structures for heritage status. This is of national importance. I would suggest that all ideas and projects in and around the Three Kings Volcanic structure be postponed until the World Heritage Committee has inspected the area. Note detailed map attached from DOC.

## **7. Compensation for dust nuisance and dewatering**

7.1 Last year the Newmont Mining Company formulated a compensation package for the Waihi Residents Association to assist all residents affected adversely by the noise, dust nuisance, and other mining activities in and around the residential areas surrounding the mine. This was duly signed between the parties. Should the applicant's resource consents be approved or favourably considered, the long-suffering residents surrounding the quarry and those situated in the dewatering zone, deserve a similar compensation package; and accordingly a condition to be attached to the resource consent.

## **8. The alternative – A magnificent quarry park**

8.1 Adjoining the 15-hectare quarry site is that portion of land known as The Three Kings Reserve (of historical and archeological importance). Also, abutting the quarry western boundary, is the Big King Volcanic Cone and reserve (similarly of significant historical and archeological importance being an ancient Pa site). What an amazing opportunity at this point in time to amalgamate all 3 titles, the nucleus to develop an outstanding quarry park. To create a world renowned parkland consisting of a lake, botanical gardens (a wonderful micro climate) specialising in N.Z. Flora, incorporating a geological area (amazing rock formations in Three Kings Quarry) and fully develop the ancient Pa site to display the intricate Maori defence trench system, and developing a wonderful recreational area for all to enjoy with walk ways and cycle tracks.

8.2 In 1996 the Christchurch City Council had the foresight to purchase the old Halswell quarry complex of approximately 66 hectares. I inspected the quarry parkland in September, a sight to behold with its central lake, landscaping, native trees, wonderful walk ways and cycle tracks. I also inspected the Te Puna Quarry Park, developed by the Tauranga City Council. The key to creating this outstanding quarry park has been to involve the community and the various

contributing societies such as the Lily and Rose Societies, Geological Society and the Abseiling Club to develop selected areas. Another prime example is Winstone's splendid rehabilitation of the old Lunn Ave quarry, creating a high class residential parkland setting in the confines of the quarry basin without the necessity to bring in millions of tons of fill.

8.3 Before any rash decisions are made the ARC and the ACC should at least carefully and diligently carry out a feasibility study on such proposal to develop a world class quarry park in central Auckland displaying our flora, volcanic cone, geological structures, and an ancient Maori Pa, a fantastic draw card for the growing tourist trade.

## **9. Rehabilitation of the Big King Cone/Historica Pa**

9.1 Unfortunately over the last 50 plus years quarrying practices have erred, the nibbling and excavation of the eastern slopes have created great scars to the Big King Cone in contravention of the 1915 Reserves & Volcanic Protection Act, which stipulates that a 40-degree slope must be preserved on public land or private land. Surely the quarry owners should be ordered to comply with this ordinance before being granted resource consents to fill the quarry. It would be an act of good faith and give us more confidence in Winstone's ability to responsibly manage a hard/clean fill operation. See attached photos of the near vertical scars on the slopes of the Big King Cone - a sad violation of the Volcanic Protection Act.

## **10. Flora and fauna at risk**

10.1 Our native birds and our friendly copper skinks are at risk from the nasty invasive superfine dust from the fill. The New Zealand Transport Authority (formerly Transit NZ) had to shift the skink population to another habitat where this protected species could thrive, when the motorway was extended into Newmarket. This small native lizard is one of the endangered species in the Auckland ecological district. Firstly, the applicant should carry out a survey of the skink population in and around the quarry (in the space of 5 minutes I found two little creatures under a pile of loose rocks). Secondly, the applicant should meet with DOC and formulate an approved rescue plan to establish a new habitat where there chance of survival is acceptable to DOC.

Thank you for listening, your time is greatly appreciated.

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Austen Bell  
Three Kings United Group Inc.  
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