

Resource Management Act 1991

Canterbury Regional Council & Christchurch City Council

Joint hearing of applications for resource consents by Blackstone Quarries Limited, being firstly to the Canterbury Regional Council ('ECan') (CRC081768) for the discharge of contaminants to air from the crushing of re-cycled concrete materials and the storage of bulk materials; and secondly to the Christchurch City Council ('CCC') (RMA92010404) for retrospective land-use consent to establish and operate a contracting depot and the storage of related machinery and also bulk materials in conjunction with permitted mineral extraction activities at 325 Old West Coast Road, Yaldhurst, Christchurch.

Hearings held at ECan offices, Christchurch 15th & 16th December, 2008

Report and decisions of Commissioners John Iseli (ECan), and Robert Batty (CCC).

Representation and appearances at the hearing:

Applicant:

- **Mr P. Maw**, legal counsel; **Mr W. Blakely**, Managing Director, Blakely Construction.

Submitters:

- **Mrs E. Hinton; Mr G. Barclay; Ms. J. Nepton**, as Secretary of the Yaldhurst Rural Residents Association; **Mr. M. McNaughton; Mr E. Rahurahu; Mr D. Thompson**, on behalf of the Old West Coast Residents Association.

Section 42A reporting officers:

- For the application to the CCC : **Ms E. Chapman**, a resource management planner, assisted by **Mr L. Moore**, an environmental health officer, **Ms. L Williams**, a traffic planning consultant.
- For the application to ECan: **Mrs J. Bier**, investigating officer.

1.0 Background to these applications and related procedural matters

- 1.1 The application site ('the site') is located at 325 Old West Coast Road (SH73). The land is on the south eastern side of the road at its intersection with Miners Road and is just over 8ha in area. This site together with the land immediately to the east, south east and west is located within the Rural Quarry Zone of the partially operative Christchurch City Plan ('the City Plan'). Land to the north on the opposite side of SH73 and also immediately to the west of Miners Road on the south side of SH73 is zoned Rural 2 in the City Plan and contains a mixture of rural activities and a number of established rural-residential properties. The land in this area also overlays the Christchurch – West Melton Groundwater re-charge Zone 1, being the principal aquifer supplying potable water to the Christchurch metropolitan area

- 1.2 The site has been worked as a quarry since prior to the 1980's and part of it has already been back-filled approximately to surrounding ground level although a pit about 10m deep remains over an area of just under 2.5ha. The applicant holds resource consent from ECan (CRC011717) to discharge contaminants into air from the deposition of hard-fill material on this site. The applicant also holds consent CRC981806.1 to discharge contaminants into air from extraction, crushing, screening and stockpiling of aggregate on the site. The previous occupant of the site (Westway Contractors Limited) held a limited resource consent which lapsed in 2005 (granted by the (then) Planning Tribunal on appeal) to screen and sell non-quarried materials from this site (bark, soil, spoil, demolition materials). At that time of that earlier consent the Tribunal considered that quarrying activity on this site would have completely ceased by about that 2005 date. Existing workshops, storage and office buildings (approximately 1,000m²) and vehicle parking areas associated with the previous quarrying and other activities are located at the north-east end of the site, as is the vehicular access to SH73.

- 1.3 The applicant company purchased the site early in 2007 on the basis that it contained remaining aggregate available for extraction (approximately 75,000m³) and further that it had a capacity to be filled with approximately 350,000m³ of 'clean-fill'. The applicant was then granted land use resource consent by the City Council to back-fill worked out areas of this site (RMA92009556) and that activity has subsequently commenced.

- 1.4 The owner of Blackstone Quarries Limited also operates a separate construction and contracting business trading as 'Blakely Construction'. Shortly after the purchase of the application site that business re-located its construction

contracting depot from premises elsewhere in Christchurch to this site, sharing the existing buildings and hard areas occupied by the quarrying operation. Blakely Construction was subsequently advised by the City Council that resource consent would be required for that construction/contracting depot activity to continue on this site.

- 1.5 Blackstone Quarries Limited lodged the required application for land use consent with the City Council in November 2007. That application was subject to limited notification in late September 2008 and attracted nine submissions of which eight oppose and one opposes in part. Although land use resource consents are not otherwise limited by the RMA as to their duration, in this instance during the course of the hearing the applicant volunteered to limit the duration of any such consent in this case to a period of 25 years.
- 1.6 In March 2007 the applicant applied for and obtained a 'Certificate of Compliance' (RMA92007726) confirming that the *"crushing, screening and storage of recycled concrete and/or gravel not quarried on the site, for use in the production of roading materials"* are permitted activities on this site, being in the opinion of Council officers uses that were within the definition of "Mineral Extraction Activity" as contained in the City Plan. Pursuant to s139(6) of the Act that certificate is therefore deemed to be a resource consent (in this case otherwise unfettered as to duration) for those particular activities. Given its relevance to this hearing the definition of mineral extraction activity is quoted below for reference:

" Mineral Extraction Activity means the use of land, buildings or plant for the purpose of quarrying and the extraction of natural sands and gravels, the processing of those materials by screening, crushing, washing or mixing with additive materials, the storage of those materials (including additive materials), and site rehabilitation works. Additive materials which may include clay, lime, cement and other mineral products not quarried on site, may only be used in the production of roading materials, and do not include bark, soil or sawdust."

- 1.7 Both in the CCC s42A report and during the hearing reference was made to subsequent correspondence from officers of the City Council to the applicant to "clarify" the terms on which the 'Certificate of Compliance' referred to above had been issued. This was said to be on the basis that the recycled concrete and /or gravel imported to the site could only be accepted as an 'additive' to be mixed with minerals extracted from the site. That officer view then begs a further question as to what might be reasonably construed as a maximum

proportion for any such 'additive materials' in relation to base material sourced directly from this site. The City Plan is silent on that question and legal opinion on it was therefore sought by the City Council. The relevance of that legal opinion to the Certificate of Compliance is discussed further in the Assessment in section 7 of this report.

- 1.8 The application to ECan is for resource consent to discharge contaminants to air from the crushing of concrete, screening of soil and storage and handling of bulk materials including crushed concrete, river run gravel, soil and green-waste. A duration period of 35 years is sought. The application was subsequently subject to limited notification to landowners within a 300metre radius of the site in July 2008. Ten submissions were received in response, one of which was in support and the other nine opposing. At the hearing the applicant confirmed that consent for the green-waste storage, sorting and chipping activity element of this application is no longer being sought. The applicant also confirmed that a consent duration of 25 years is now requested.
- 1.9 Prior to the hearing and pursuant to s42A of the Act officer reports from the respective councils had been produced and circulated to the applicant and submitters by Ms Chapman. She considered the proposed contractor's depot to constitute a 'non-complying activity' in terms of relevant provisions of the City Plan and recommended that resource consent be declined for that land use. For the Regional Council, Ms Bier's s42A report assessed the air discharges associated with the storage, processing and crushing of concrete, together with screening of soil and storage of bulk materials to be 'discretionary activities in terms of the relevant provisions of the Transitional and Proposed Regional Plans. Subject to a range of proposed conditions, her report concluded that resource consent could be granted for the air discharges concerned.
- 1.10 Mr John Iseli has been appointed as a Commissioner by ECan to hear and determine resource consent application CRC081768 in relation to the proposed air discharges. Mr Robert Batty has been appointed as a Commissioner by CCC to hear and determine application for land use resource consent RMA92010404. While we accept that the applications before us relate primarily to the proposed use of the site as a contracting depot they are also closely interlinked with mineral extraction activities on this site, particularly in relation to the crushing of re-cycled concrete materials.

2.0 Outline of activities proposed

Contractors Depot

2.1 In addition to the shared use (with Blackstone Quarries Limited) of the existing three-bay workshop and office building on site, the contracting activity involves the following areas within the site some of which were defined on the 'Site Plan' subsequently submitted by the applicant:

- Use of an area of about 4,000m² to the south and west of the workshop area for the open storage of vehicles and machinery associated with the contracting business (when these are not otherwise engaged off site). Referred to as 'Area 1' on the Site Plan;
- A truck-wash area. Referred to as 'Area 2' on the Site Plan;
- An area of about 10,000m² for stockpiling and screening of up to 25,000m³ of soil, including soil brought in from and for contracting jobs. Referred to as 'Area 4' on the Site Plan;
- An area for concrete crushing (in the base of the existing pit) Referred to as 'Area 5' on the Site Plan;
- An area of about 1,000m² for open storage of construction materials including netting, warratahs, plastic pipe, concrete pipe, and treated timber required for contracting jobs.
- An area of about 100m² for the storage of steel mainly from recycled concrete which is crushed on the site;

2.2 With the deletion from the application of the proposed green-waste storage, sorting and chipping activity, the total open storage area to be associated with the contracting business and depot is approximately 15,100m². Hours of operation are now proposed to be between 0600 and 1900 Mondays to Saturdays inclusive, and for no more than 2 hours per day on any Sunday or Public Holiday, for up to a maximum of 5 such days in any one calendar year. Vehicle movements generated by the contracting business are to be no more than 100 per day. Additional conditions dealing with limitations on specific aspects of site operations, noise control and surrounding landscaping were volunteered by the applicant at the hearing. Importantly these also included the limitation of contracting activity to a period of 25 years on this site. The

above activities are to be assessed as 'non-complying activities' given the breach of site coverage rules for 'Other activities' in this 'Rural Q (Quarry) zone'.

Air Discharge consents sought

2.3 The following activities involve the discharge of contaminants to air:

- Dust emissions from the portable concrete crusher.
- Dust from the storage and handling of bulk materials (other than those already consented)
- Dust from the screening of soil for re-cycling
- Combustion gases from the diesel-fired crushing and screening plants.

2.4 The above activities are to be assessed as 'discretionary activities' under the provisions of both the Transitional Regional Plan ('TRP') and the proposed Natural Resources Regional Plan ('PNRRP'). Land use associated with the concrete crushing and the bulk storage and handling of crushed concrete and river-run gravels have been confirmed as 'complying activities' by the City Council's certificate of compliance (RMA92007726). The processing and storage of soil therefore requires both land use consent from the City Council and discharge consent from the Regional Council.

3.0 The case for the applicant

3.1 Mr Blakely's evidence outlined the operation of the contracting business in combination with quarrying operations on this site together with his responses to concerns raised by submitters. He considers that there is a close linkage between construction activities that require aggregate and those requiring soil and clean-fill demolition material to be cleared from construction sites. Such material can be re-cycled or used as fill to rehabilitate the worked out quarry area. Concrete extracted from demolition material could also be crushed and used as an 'additive' to provide roading material within the 'mineral extraction activity' permitted on this site. The combined use of the same haulage vehicles for both delivery and removal of bulk materials to and from the site provides both time and cost savings and also avoids duplicated / increased traffic movements to and from the site.

3.2 Mr Blakely confirmed that since purchasing the site his construction company had complied with the abatement notice served by the City Council on the previous owner. This required filling of the quarry pit area with some 25,000m³ of

clean-fill as it had previously been worked to below the permitted depth. He noted that the site is well screened by mature planting along the SH73 and Miners road frontages. The storage of machinery on site is likely to be maximised only during a two week period over Christmas it being required for economic operation on projects elsewhere for the majority of the time. He considered that the screening, storage and re-cycling of top-soil from this site was a more efficient use of this scarce resource than as quarry fill.

- 3.3 While the rehabilitation of worked out quarry areas was proceeding, allowing for the extraction of the remaining approximately 75,000m³ of existing aggregate, Mr Blakely estimated that with likely annual availability of clean-fill, excluding soil and re-cycled/crushed concrete being about 8,200m³, it would take at least 25 years for the filling of this quarry to be completed. In addition to the extraction of the remaining aggregate from this site Mr Blakely's construction company holds resource consents to extract aggregate from the Waimakariri River and he also intends to source aggregate from other quarries in the Miners Road block (including the land immediately to the east owned by Winstone Quarries Limited). It is his understanding that he can store and process aggregate material sourced from such other land on this site as permitted 'mineral extraction activity'.
- 3.4 Referring to concerns raised by submitters, Mr Blakely considered that there would be little if any discernable noise effects beyond the site as the screening and crushing machines are well located below existing ground level and only operate within normal working hours (other than for the 5 potential emergency days per year and then only for a maximum of two hours on any day). Similarly he stated that he was not aware of any complaints from properties beyond this site about fugitive dust from any activity on this site. He believes that there are unlikely to be any such discharges, given machine and vehicle operating procedures together with existing dust mitigation measures (subject to conditions of ECan resource consent CRC981806.1) already in place on this site. As to potential effects on groundwater we were informed by Mr Blakely on our site visit that his company receives regular monitoring reports on its existing on-site bore from civil engineers Tonkin & Taylor, with no adverse quality effects being detected over the past two years. Mr Blakely saw no difficulties in complying with the conditions in relation to the separation distance of activities on site from overhead transmission lines as sought by Transpower in its submission.

3.5 Mr Maw presented legal submissions on the above applications. In his opinion the proposed activities will have no more than minor adverse effects on the environment and were effectively indistinguishable from effects of activities already permitted by the City Plan in this Rural Q (Quarry) zone. Referring to several of the opposing submissions that expressed concerns as to the potential for concrete dust to cause silicosis, he submitted that there was no scientific evidence to support such a contention and that the following circumstances on this particular site indicated that dust discharges would not adversely affect neighbouring properties in the Rural zone:

- A considerable separation distance between the concrete crushing plant and dwellings in the Rural 2 zone to the west and north;
- That crushing was to occur, where possible, below existing ground level (a specific location being indicated for such activity on the floor of the current pit at the southern end of the site);
- That the concrete crusher is fitted with spray suppression nozzles
- That only a small fraction of concrete dust would be smaller than PM₁₀
- That nor-westerly winds would tend to carry any dust away from the Rural 2 zone

He further submitted that should any future evidence show that crushing concrete did produce adverse health effects a review condition of the type recommended in condition 14 of Ms Bier's s42A report could address that eventuality. He endorsed the assessment in that report concluding that the discharge consents sought could therefore be granted subject to appropriate conditions.

3.6 Turning to the application for land use consent to operate the contracting depot, Mr Maw emphasised that the depot was to operate while permitted mineral extraction activities continued to be carried out on this site. He cited the decision of the Environment Court in the case of *Road Metals Company vs the Christchurch City Council and the Canterbury Regional Council* (C163/2006), emphasising that land uses in the surrounding 'Rural' and 'Quarry' zones constitute a mix of what are essentially business activities and that their character and amenity do not equate to "noise-free peace and quiet and clean air". The Judge in that case further commented that quarrying was a vital component of the character of this area and is likely to continue to be so.

3.7 Mr Maw acknowledged that the objectives and policies referred to by Ms Chapman in her s42A report were relevant but contended that her assessment of them in relation to the contracting activity had been based (wrongly in his submission) upon a supposition that it was intended to continue beyond the use of the site for 'mineral extraction activity'. He reiterated that is not the applicant's intention. In his view the contracting activities being carried out from this site are directly compatible with its on-going use for mineral extraction activity and can not therefore be said to be contrary to these objectives and policies. On the issue of a potential for 'precedent' to be created by any consent to this activity, he contended that there were 'special' features which could be said to distinguish this application, the foremost among which was that the activity would only be conducted only on an 'existing quarry' site, not a former one. There would therefore be no question of a precedent enabling the 'proliferation' of non rural related activities to establish in the Rural (Q) zone.

4.0 Submitters

4.1 **Mrs Hinton**, a local resident, presented a submission primarily expressing concern regarding the potential effects of the proposed contaminant discharges to air. Mrs Hinton's residence is located to the north of the Blackstone Quarries site. She stated that she had lived at this address for approximately two years.

4.2 Mrs Hinton stated that no air quality monitoring had been undertaken by ECan in the local area, notably during summer when dust emissions can be significant. She considered that PM₁₀ (fine particles less than 10 microns in diameter) emissions from the Blackstone site may be significant and contribute to adverse health effects. Mrs Hinton submitted that insufficient information had been provided concerning the composition and quantity of contaminants discharged from concrete crushing and the other proposed activities. She considered that appropriate conditions for dust control measures have not been proposed and that a precautionary approach should be taken regarding the application.

4.3 Mrs Hinton considered that real-time monitoring of suspended particulate matter at the site boundary would be appropriate, in a similar manner to that reported for a large quarry in Mt Wellington, Auckland. This would allow trigger levels to be set that would require operations to cease if dust concentrations at the boundary were high. Mrs Hinton stated that she had experienced significant dust originating from the existing quarry site during strong southerly winds, particularly in summer. She considered that the tracking of mud onto the road by trucks contributed to this problem. Mrs Hinton provided numerous references and supporting materials relating to her concerns.

- 4.4 Regarding potential effects of any discharge of contaminants to land that may arise (including any wastewater from the concrete crushing plant), Mrs Hinton noted that the water supply well on her property is approximately 19m deep. She expressed concern that water quality in this well may be affected.
- 4.5 **Mr Barclay**, a resident at 196 Miners Road, spoke to his submission. He stated that he had lived in the local area since 1968. His concerns included effects of noise, air pollution, traffic and water contamination associated with the proposed activities. Mr Barclay questioned the dust monitoring procedures to be undertaken, if consent was granted. He noted that autumn is the worst period for dust storms from existing quarries in the local area. He also stated that the truck wash facility and watering proposed to control dust may require consideration of water availability.
- 4.6 **Ms Nepton** presented a submission on behalf of the Yaldhurst Rural Residents Association. She stated that she had previously lived at 367 Old West Coast Road for approximately five years. Ms Nepton considered that the effects of the discharge would not be minor and that insufficient information had been provided by the applicant. She observed that significant dust can occur at a distance of 150-200m from the existing Blackstone Quarries site during strong winds.
- 4.7 Regarding the proposed concrete crushing, Ms Nepton stated that concrete should not be regarded as inert. It contains silica and trace quantities of metals, ash and other contaminants. She submitted that the silica present in the discharge would have potential to cause silicosis, as indicated by research concerning occupational exposure of workers in the extraction industry. Ms Nepton considered that a precise area for crusher operation should be specified, with crushing occurring on a concrete pad and contaminants being filtered and contained. She stated that any consent granted should be limited to a duration of not more than five years.
- 4.8 Concerning overall dust emissions from the site, Ms Nepton considered that trucks should be covered, wheels washed prior to departure, and that permanent dust monitoring should occur. She stated that a lack of previous complaints does not indicate that dust effects are minor. Ms Nepton also provided supporting documentation in relation to the potential effects of discharges to air and water from the concrete crushing process.
- 4.9 **Mr McNaughton** stated that he had resided at 328 Old West Coast Road, to the north of the site, for the past 26 years. He considered that significant adverse

effects of noise and dust from the quarry site had occurred during that time. He submitted that the proposed activity is not consistent with the City Plan, which requires rehabilitation after quarry use.

- 4.10 Mr McNaughton stated that he had formerly managed a site at Islington where concrete recycling occurred. He observed that it was difficult to eliminate the discharge of dust and other debris created by the activity, even using sprinklers, bunding and wind cloth protection. Mr McNaughton also expressed concerns about potential noise pollution, groundwater contamination and traffic.
- 4.11 **Mr Rahurahu** resides at 365 Old West Coast Road, to the west of the Blackstone Quarries site. He stated that he purchased the property in 2002 anticipating that quarry sites in the Rural Q zone would be restored to pastoral grassland within approximately five years.
- 4.12 Mr Rahurahu expressed concern regarding potential health hazards associated with discharges to air from concrete crushing, based on his experience working with concrete as a builder. He noted that concrete crushing may not occur below ground level (in the quarried pit) at all times.
- 4.13 Discussing the issue of dust emissions from the Blackstone site, Mr Rahurahu noted that he was not normally affected to date because of his property's position in relation to prevailing winds. However he noted that he does experience adverse dust effects caused by quarries to the south of his property, especially in summer. He noted the inadequacy of the shelter belt on the northern boundary of the Blackstone site, particularly the gap where a fire had occurred. He stated that he had not observed effective use of the water tanker for dampening surfaces on the existing quarry site. Mr Rahurahu considered that the stockpiles of soil would add to the dust problem. In response to questions, he stated that he had experienced some dust from screening activities on the Blackstone site during easterly winds.
- 4.14 **Mr Thomson** presented a submission on behalf of the Old West Coast Road Residents Association. He lives at 302 Old West Coast Road. Mr Thomson submitted that the proposed activities are not compatible with the rural zoning of the area.
- 4.15 Mr Thomson stated that as a Civil Engineer he had experience with concrete in the construction industry, having been a shareholder in a crushing and screening plant in Dunedin. He submitted that a literature search indicated that dust from the proposed activities can contain crystalline silica and cause silicosis in the lungs. He noted that this had been identified as a potential health issue

for quarry workers. Mr Thomson stated that the emission rate of crystalline silica from the proposed activities is unknown and that further monitoring would be required. He also stated that other hazardous contaminants, including chromium, are contained in concrete.

- 4.16 Discussing dust emissions from the Blackstone site, Mr Thomson considered that only a small percentage of dust may come from the concrete crushing operation due to the use of water sprays. However he observed that the majority of dust transported to neighbouring properties comes from every surface in the quarry. He found that dust carried across Old West Coast Road during a southerly wind change caused a traffic hazard.
- 4.17 With reference to the proposed concrete crushing, Mr Thomson consider that the design of the crushing mechanism could affect dust emissions. He referred to the Huntington Park case in the USA where a very large mound of concrete and associated crushing had caused reported adverse effects at nearby residential properties. He considered that a limit should be placed on the volume of concrete and other materials stockpiled on the Blackstone site.

5.0 Section 42A Officers' Reports

Environment Canterbury

- 5.1 **Mrs Bier** prepared a S42A report on behalf of Environment Canterbury that had been distributed to all parties prior to the hearing. Mrs Bier concluded that the activity could be conducted in a manner that is consistent with the policies and objectives of the Regional Policy Statement and the Proposed Natural Resources Regional Plan. She considered that the application to discharge contaminants to air could be granted, subject to a set of recommended conditions.
- 5.2 Referring to the effects of concrete crushing, Mrs Bier noted that mitigation measures are proposed to prevent any significant adverse effects. These measures include crushing below natural ground level where possible, dampening with sprinklers, and the presence of the existing shelter belt of pine trees. She stated that she does not have expertise in concrete composition or the potential effects of crystalline silica emissions. However Mrs Bier noted that consent had been recently granted by Environment Canterbury authorising the discharge of dust from mobile concrete crushing equipment.
- 5.3 In response to questions from the commissioners, Mrs Bier stated that it would be appropriate to include a condition of consent limiting the output of the engines

servicing the concrete crusher and soil screen. She also considered that it would be reasonable to specify minimum separation distances from the boundary for the location of this equipment. Mrs Bier noted that a condition could be added that required crushing operations to cease above a specified wind speed.

Christchurch City Council

- 5.4 Ms Chapman's report was compiled with the assistance of Mr Moore (Environmental Health issues), Ms Williams (Traffic issues), and Ms Stout who did not attend the hearing but considered the issue of transmission line separation from activities on site. Mr Moore's assessment covered potential health effects on the surrounding environment of the contracting depot activities on this site including those from noise and dust emissions, the potential for vermin attraction/harbourage as well as potential effects on the quality of groundwater.
- 5.5 Having measured the current ambient noise levels in this locality on a weekday afternoon Mr Moore considered these broadly comparable to those that might exist in an urban residential area. He had then considered the potential effects of the operation of the types of machinery proposed to be used on site, allowing for the fact that green-waste processing is no longer proposed. He noted that the existing earth mounds on the northern and western boundaries do not extend for the full length of those boundaries and that they vary in height from 2m – 3m along the western (Miners Road) frontage to 1m – 2m along the northern (SH73) frontage, together with substantial pine tree planting along these boundaries.
- 5.6 While the tree planting in Mr Moore's view provides adequate visual screening of site activity, the existing mounding on the northern boundary would not provide as effective an acoustic screen as that to the west and mounding along both of these site boundaries would need to be extended/increased in height accordingly. He noted that there are eight occupied residences within 200m of these site boundaries (primarily to the north) and that the City Plan noise rules included " *special standards for (activities in) quarry zones*" which are to be applied either at the boundary of any site in the Quarry zone or at the notional boundary of any dwelling site. Based upon the more stringent of those standards (measured at the site boundary) he concluded that if those noise standards are to be complied with, then there would need to be limitations on the potential location of both the soil screening and concrete/aggregate crushing equipment as well as upon the hours within which these would operate. Similar restrictions would also need to apply to hours of site operation in

relation to vehicle noise etc at weekends. He recommended that if consent is to be granted then a condition should be imposed requiring certification by an appropriately qualified acoustician that actual noise emissions from equipment and vehicle operations at the site have been measured and shown to comply with City Plan noise standards.

- 5.7 Control of dust emission is the statutory responsibility of ECan, however the City Council is concerned with the location of land use activities that may give rise to such. In Mr Moore noted that about half of the proposed soil stockpile Area 4 is located within the City Plan 50m set-back requirement from the Quarry zone boundary for stockpiled materials, and if this activity is to be consented he recommended that stockpile be set back to 50m so as to assist in reducing the potential for dust emission from it.
- 5.8 Mr Moore also acknowledged that the control of discharges to ground is primarily a matter within the jurisdiction of ECan, however the City Plan also contains rules on the storage and containment of hazardous substances such as vehicle fuel. Little or no detail is provided with the application on that matter and Mr Moore therefore recommended conditions to deal with that aspect if consent is being contemplated.
- 5.9 Ms Williams traffic assessment identified that the principal traffic matters to be considered in this case were parking, traffic generation and site access. She concluded that there is ample overflow space on-site (beyond the present marked parking area) to cater for foreseeable parking demands from the joint activities. As to traffic generation she considered that the 100 trips per day by the contracting activity would comply with the limit for 'other activities' in the Rural (Quarry) zone and that the nature of traffic movements would be largely indistinguishable from those associated with quarrying activity, SH73 having ample capacity to accommodate the flows from the contracting business. However Ms Williams considered that the level of traffic generation on Sundays would be greater than that anticipated from 'rural' activity, particularly once quarrying ceased.
- 5.10 Ms Chapman's report adopted and relied upon the foregoing environmental health and traffic impact assessments. She had considered relevant objectives and environmental outcomes anticipated in relation to activities within the Rural (Quarry) zone and noted the areas of non-compliance in the current application for land use resource consent. In examining the potential application of the 'permitted baseline' principle to this case, she drew a distinction between land use activities in the Rural (Quarry) zone and those

elsewhere, based upon the concept that the mineral resources of this zone are finite and hence the timeframe over which those activities (or like 'effects on the environment') must also be seen as being limited. In her view therefore if the contracting depot activity is seen to be 'ancillary' to quarrying here, then it would be pertinent in baseline effect terms to consider the realistic remaining life of the mineral resource on this site.

- 5.11 While acknowledging the Compliance Certificate for 'mineral extraction activity' on this site, she maintained that in relation to future activity of that type it is also pertinent to consider the distinction between the scale of imported 'additive' material(s) in relation to the scale of indigenous minerals worked from this site when considering whether 'mineral extraction' was still the primary activity on the site. In that regard she referred to the legal opinion provided to the Council suggesting that no more than half of the materials stored or used (as additives to be mixed with extracted materials) should be comprised of imported materials. I note that interpretation would raise uncertainties for enforcement of any such limitation and would probably require the definition of 'mineral extraction activity' in the City Plan to be reviewed by a future plan change.
- 5.12 On the basis of the above legal opinion, Ms Chapman concluded that the likely split between indigenous and imported material being proposed here would not constitute a 'permitted activity' and therefore that the 'permitted baseline' principle should not be considered in terms of effects on the environment in this case.
- 5.13 Ms Chapman accepted that there was a residual quantity of aggregate that could be quarried from this site. In her opinion based on the above interpretation as to a reasonable proportion of 'additive material', together with the likely extent of traffic movements to and from the site, this suggested a period of between 6 months and nearly 5 years before the indigenous material on site was worked out. Turning to consider the potential rate of filling of worked out areas on site, information provided by the applicant suggested some 41 years for this site to be filled. Based upon her own assessment from Council records of activity between January 2007 and September 2008, and allowing for average monthly clean-fill quantity availability she considered a more realistic filling period to be just over nine years.
- 5.14 Having regard to all of the foregoing, Ms Chapman considered that the contracting activity has the potential to have more than minor adverse effects on the surrounding environment in terms of traffic, noise, and dust etc. She

further considered this activity to be incompatible with surrounding rural uses and existing amenities of those residential neighbours in the adjoining Rural 2 zone. She noted that the environmental outcomes for the Rural (Quarry) zone anticipated by the City Plan are that worked out quarry sites would be rehabilitated and subsequently used for activities compatible with surrounding rural amenities and the amenities of rural residents. She considered that the proposed contracting activity is contrary to some of the objectives and policies, particularly those which seek to limit the expansion of industrial activities into rural zones and encourage the rehabilitation of quarry sites. On balance therefore she concluded that this activity is 'contrary to' the most directly relevant objectives and policies of the City Plan and therefore that it failed to meet the 'threshold' test of section 104D of the Act. In her opinion resource consent should therefore be declined.

6.0 The Applicant's Right of Reply

- 6.1 Mr Maw responded to the submissions and matters raised during the course of the hearing. With regard to the effects of dust emissions, he noted that significant dust is generated from other quarries in the area, including Taggarts and KB quarries. He considered that a permitted baseline assessment should take into account the existing environment.
- 6.2 Referring to concerns regarding dust discharged from the concrete crushing operation, Mr Maw stated that the crusher would be located at least 125m from Miners Road to the west and 330 metres from Old West Coast Road to the north. He noted that the setback distance from the crusher to dwellings of neighbours who have made submissions is over 400 metres. There is a currently unoccupied dwelling located over 250m to the west-northwest of the proposed crushing site. Mr Maw stated that the Mt Wellington quarry examples discussed by submitters had only a 200m setback from that quarry to a residential zone.
- 6.3 Turning to the proposed soil screening operation, Mr Maw stated that screening would occur at least 100 metres from the property boundary. The nearest dwellings are located more than 200m from the soil screening areas.
- 6.4 Mr Maw discussed possible conditions of any consent granted for the discharge of contaminants to air. He provided additional draft conditions that limit the engine capacities of the concrete crushing and soil screening plants to 228 kilowatts and 150 kilowatts respectively. He also suggested a condition preventing operation of the concrete crushing or soil screening plants when wind speed measured at the site is greater than 15m/s and the wind direction is

towards the Rural 2 Zone. Mr Maw noted that a 15m sealed access-way to the site is already in place and he considered that further sealing is not necessary for dust control. He stated that fresh chip and a water cart are used to minimise dust from truck movements on internal roadways.

- 6.5 Mr Maw confirmed that consent duration of 25 years is now sought for both the land use consent and the discharge permit. He stated that while the Transpower submission is not relevant to the discharge permit application to Environment Canterbury, the relevant draft land use consent conditions could also be imposed on the discharge permit.
- 6.6 Concerning the issue of water supply contamination raised by submitters, Mr Maw stated that the general direction of groundwater flow is from the northwest to the southeast. Therefore he noted that rural-residential properties to the north and west of the Blackstone site would be up-gradient in the event of any groundwater contamination.
- 6.7 Turning to submitters' concerns regarding the effects of dust emissions, Mr Maw considered that the substantial separation distance to neighbouring dwellings is an important mitigating factor. He found that there was no evidence that exposure to small concentrations of concrete dust from crushing at these distances would cause adverse health effects. Mr Maw contended that the evidence presented by submitters regarding crusher dust effects relates to occupational exposure and is not relevant to the circumstances of this case.
- 6.8 Mr Maw stated that only the fine fraction of dust (PM₁₀ or particles less than 10 microns in diameter) is of health concern. He submitted that the PM₁₀ concentration would be very small after dispersal beyond the property boundary and therefore any adverse effects would be minor. He considered that Mrs Bier's opinion, as expressed in her Section 42A report, is independent and professional and should be given weight.
- 6.9 In conclusion Mr Maw submitted that the purpose of the Resource Management Act focuses on sustainable development, not simply mitigation. He considered that the use of this site as a contractors depot together with the related application for discharge consent are both consistent with the integrated management of existing natural and physical resources and that the proposed activities are efficient and sustainable.

7.0 Assessment

Discharge to Air

- 7.1 The consents sought by Blackstone Quarries Ltd to discharge contaminants to air relate specifically to emissions from concrete crushing, storage and handling of bulk materials, screening of soil and combustion of diesel in the crushing and screening plants. Existing consents (CRC011717 and CRC981806.1) already authorise the discharge of contaminants into air, primarily dust, from the deposition of hard-fill material and from extraction, crushing, screening and stockpiling of aggregate on the site. It is therefore necessary to distinguish the effects of the proposed discharges from those already consented and to have regard to the cumulative effects of all discharges from the site.
- 7.2 Turning firstly to the proposed discharge from concrete crushing, information has been submitted concerning the potential effects of crystalline silica and trace metals emitted from the process. Examination of this information indicates that reported health effects such as silicosis are due primarily to occupational exposure to large concentrations of dust experienced primarily by workers in quarrying and associated industries. These effects need to be differentiated from those effects that may occur due to the predicted environmental exposure at neighbouring properties to fine particulate matter (PM₁₀) discharged from concrete crushing. The primary issue in this case is therefore the extent to which the proposed mitigation measures would be effective in reducing PM₁₀ concentrations to minor levels at neighbouring properties.
- 7.3 The applicant has detailed a number of specific mitigation measures in relation to concrete crushing. Specifically these include:
- Location of the crusher in a designated area at least 125m from Miners Road to the west and 330 metres from Old West Coast Road to the north.
 - Concrete crushing to occur, where possible, in the base of the pit below existing ground level.
 - Crusher operation only between 6am and 6pm, Monday to Saturday.
 - Use of spray suppression nozzles on the crusher to minimise dust emissions.
 - Ceasing concrete crushing when wind speed measured at the site is greater than 15m/s and the wind direction is towards the Rural 2 Zone.
 - Limiting on-site storage of crushed concrete to less than 10,000 tonnes.

- Restricting the height of the crushed concrete stockpile to 5 metres above ground.

7.4 The separation distance from the proposed crushing operation to all existing neighbouring dwellings is over 250m. The distance to dwellings of neighbours who have made submissions is more than 400 metres. Having regard to the proposed mitigation measures and the setback distances to neighbouring properties, I consider there is sufficient evidence to indicate that the concentration of inhalable particulate matter (PM₁₀) at neighbouring Rural 2 properties caused by concrete crushing would be very small. The applicant did not present expert air quality evidence or attempt to accurately quantify PM₁₀ concentrations. However I accept that this would be extremely difficult to achieve to any degree of certainty in this case. Rather it is more appropriate to focus on the nature and implementation of the proposed dust control measures.

7.5 The submitters have raised examples of other quarries and crushing operations where adverse effects have been reported. However the circumstances are different to the proposed application. In the case of the Mt Wellington quarry, an urban residential area is located approximately 200m from a large working quarry and it is therefore expected that a high degree of monitoring and dust control would be required. In the case of the Huntington Park, USA 'concrete mountain' the concrete stockpile is reported as being approximately 80ft high and in close proximity to residential neighbours, with crushing occurring 24 hours per day. That example is very different to the proposed crushing operation of limited scale with substantial separation from neighbours.

7.6 Of relevance are the effects of other permitted discharges from the Quarry Zone. The discharges from the Blackstone site and other nearby quarries result in cumulative effects of dust. I accept that concrete crushing is likely to contribute only a very small percentage of the total dust concentrations experienced beyond the boundary. It is also noted that Environment Canterbury has recently granted consent CRC081377 to Southern Demolition and Salvage Ltd to discharge contaminants to air from two mobile concrete crushers of similar scale to that proposed. The consent (5 year duration) would allow two crushers to operate on the Blackstone site for up to 40 days per year, provided crushing occurs at least 25m from a 'sensitive activity' (including a neighbouring dwelling). The consent requires that crushing and handling of crushed concrete occur when the average wind speed on site is less than 5m/s.

- 7.7 Taking into account the above permitted discharges, I consider that any additional effect of concrete crushing emissions is likely to be minor. That conclusion is based on crushing occurring in the pit, below ground level, and when the maximum (not average) wind speed measured on-site is less than 10m/s. On-site monitoring and recording of wind speed and direction is considered to be appropriate in this case. The applicant has estimated that filling of the quarry pit will require approximately 25 years. Therefore operation of the crusher and storage of crushed concrete below ground level at all times should be achievable.
- 7.8 With regard to dust discharges from soil screening, the applicant proposes to undertake screening in a designated area at least 100m from the property boundary. The nearest dwellings are located more than 200m from the soil screening areas. In addition, Mr Moore has recommended that soil stockpiles be setback at least 50m from the property boundary. As discussed for concrete crushing, I consider that a gust wind speed restriction of 10m/s is appropriate to prevent dust that could affect neighbours during strong easterly winds. Provided these measures are implemented, I consider that any adverse effects from the proposed soil screening and storage will be minor.
- 7.9 The diesel-fired engines powering the crusher and soil screen have been limited in size to 228kW and 150kW respectively. Taking into account the scale and location of these combustion sources, I accept the applicant's evidence that these discharges are unlikely to cause adverse effects at neighbouring properties.
- 7.10 The storage of bulk materials and associated truck movements will contribute to the total dust emissions from the Blackstone site. The evidence indicates that, at times, dust discharges from the site are likely to have affected neighbouring rural properties, particularly those immediately north of the site. The greatest potential for nuisance effects appears to arise during relatively brief periods when strong winds occur with a southerly change, following hot and dry north-westerly wind conditions. Further improvements in overall dust control measures are appropriate to minimise the cumulative impact of dust emissions. In this regard I consider that a dust management plan for the site is necessary. Such a management plan would specify procedures and responsibilities for dust control, including dampening of internal unsealed road surfaces, on-site vehicle speed limits, wetting of stockpiles, shelter belt maintenance and truck wheel washing.

- 7.11 Provided improved dust control occurs via a comprehensive management plan, I find that the cumulative effects of dust emissions from the site are acceptable. I consider that the concentration of PM₁₀ at neighbouring dwellings is likely to be well below levels associated with adverse health effects. Real-time monitoring of dust at the property boundary (as occurs in the Mt Wellington quarry case) is not considered to be necessary or reasonable in this case, given the nature and scale of the proposed activities.
- 7.12 Submitters have raised concerns regarding the potential for discharge of wastewater to land from the use of water sprays on the concrete crushing operation. In response the applicant has asserted that the nature of the operation (fine water sprays) will not result in any wastewater discharge to land. This matter therefore falls outside the scope of this decision. However it is noted that any such discharge to land would likely require a separate consent. If concrete crushing is undertaken and the applicant is incorrect in the assertion that no discharge to land occurs, enforcement action can be taken by Environment Canterbury.
- 7.13 I have examined the relevant policies and objectives of the Regional Policy Statement and the Proposed Natural Resources Regional Plan. I agree with Mrs Bier that the proposed activities could be undertaken in a manner consistent with those objectives and policies. With regard to Policy AQL6 of the PNRRP, a condition of consent requiring no objectionable or offensive dust beyond the property boundary is appropriate. Policy AQL10 requires a precautionary approach in assessing the effects of hazardous air pollutants (such as crystalline silica from concrete crushing). Regard has been had to this policy in terms of the comprehensive conditions of consent and the duration of consent.
- 7.14 The issue of consent duration has been considered carefully. The applicant seeks a term of 25 years, whereas submitters request a maximum term of five years, if any consent is granted. A primary factor in this case is the potential for improvement in the state of knowledge regarding the nature and effects of the discharge from concrete crushing. Changing sensitivity of the receiving environment is also a relevant matter to consider with regard to term of consent. This includes the potential for further residential development in the rural zone to the north and west of the site in the medium-term. Given the above factors, a consent duration in the order of 10-15 years is considered to be reasonable. On balance, and adopting a precautionary approach, it is my determination that a consent duration of 12 years is appropriate in this case,, subject to a condition that allows review of conditions on an annual basis if any

significant adverse effects are identified. In reaching this decision I have taken guidance from case law, in particular the decision of the Environment Court in *PVL Proteins Ltd v Auckland Regional Council (A061/01)*.

- 7.15 I conclude that any adverse effects can be controlled to the extent that they are acceptable in relation to the purpose and principles of the Act (Part II). With regard to Section 7 of the Act, mitigation measures are proposed (and required by conditions of consent) that would enable amenity values and the quality of the environment to be adequately maintained.

Land Use

- 7.16 There is an inextricable link between the 'mineral extraction' activities and the rural contracting business operating on this site. However, it must be emphasised that the resource consent currently being sought is for the latter land use and not the former. Having said that, the reception, crushing, screening, storage and re-cycling of demolition concrete and/or gravel not quarried on this site for use in the production of roading materials forms an integral part of Mr Blakely's contracting operations.
- 7.17 Those latter activities have been granted a certificate of compliance by the Council on the basis that they fall within the definition of "mineral extraction activity". By subsequent letters to the applicant dated 10th October 2008 and 10th December 2008 the Council sought to limit its interpretation of the extent to which any imported materials (gravel or concrete) may properly be seen to be associated with 'mineral extraction activity'. In essence that limitation suggests that any imported gravels and/or concrete can only be accepted for storage and/or processing on this site where they are: (a) being used to produce roading material, **and** (b) properly constitute 'additives' for that process rather than as the primary content of such material. "Additive" in Mr Prebble's legal opinion amounts to no more than 50% of the total volume of any roading material so produced. That view would seem to be logical and a reasonable interpretation of that wording – anything greater than 50% would constitute the primary constituent rather than an additive one.
- 7.18 The significance of the above considerations goes to the potential duration of 'mineral extraction activity' on this site and in turn the rate of such extraction. Opposing submitters clearly anticipate an 'end' to such activity and the environmental outcome being rehabilitation of the site to some form of pastoral farming/grassland activity 'appropriate' to this rural location within the foreseeable future as indicated in the City Plan Rural (Quarry) Zone description

and purpose . If 'mineral extraction activity' both on this site and in the area generally can effectively be extended indefinitely by the importation of mineral materials from elsewhere, that environmental outcome is unlikely to be achieved at least for many years, possibly being postponed indefinitely.

- 7.19 In the meantime the site exists as a location in the Rural (Quarry) zone wherein all parties accept that there remain at least some mineral resources in situ that can be worked as a permitted activity. In support of that activity there also exist physical resources in terms of the existing office and workshop buildings as well as established screen planting and earth mounding along most of the site's road frontages. Previous and future mineral working on this site will also require filling and rehabilitation necessitating supply of appropriate fill material and heavy vehicle movements of a similar type to those already associated with the contracting activity. The stockpiling of soil will also be necessitated for rehabilitation purposes.
- 7.20 The applicant seeks consent for this activity in conjunction with and as being complementary to quarrying (i.e. 'mineral extraction activity') on this site. I am satisfied that the definition of that activity makes it clear that any 'additive' material is to be of no greater quantity than (rather than a replacement for) that sourced on site for that purpose and with which it is to be mixed. I am also satisfied that resultant material produced by mixing is only to be used as roading material. As far as I am aware however there is no other Plan requirement as to the rate at which mineral extraction or site rehabilitation is to occur or the rate at which any mixed roading material is to be transported off-site.
- 7.21 While there is an evident synergy between the range of activities involved in ongoing mineral extraction activity and the contracting operation, it is also relevant to consider whether this location is appropriate either in the absence of extraction activity and/or after rehabilitation of the site is achieved. Opposing submitters suggest that the contracting activity is of an industrial nature better suited to a Business 5 or similar urban industrial zone.
- 7.22 Having considered the above issues against the objectives, policies and environmental results anticipated for land in the Rural (Quarry) zone I am satisfied that for so long as the contracting operation is operated in conjunction with and complementary to 'mineral extraction activity' then its effects on the environment would be similar to those quarrying activities 'permitted' by the City Plan and generally consistent with its intentions as to the effects of traffic, noise, dust and visual impact on the surrounding rural area.

- 7.23 As a 'stand alone' activity however and following the rehabilitation of this site when its gravels are worked out I do not believe that contracting operations of this scale would be compatible with the intended (by then) dominant rural character of the surrounding area and protection of the quality of that environment or of the amenities of residents in that area, albeit that this is not a 'rural residential' area so far as the city Plan is concerned. I therefore conclude that the contracting operation should be limited as to its duration to the remaining life of mineral extraction activity from this site.
- 7.24 Some recognition of the above likelihood was reflected by the applicant, given that Mr Maw 'volunteered' a duration on land use consent of 25 years in this case. Ms Nepton in the YRRA submission acknowledged a limited duration of 5 years while Ms Chapman appeared to adopt a similar period as the remaining duration for gravel extraction but recognised a period of approximately nine years overall including filling and rehabilitation of the site. Against those views consideration should also be given to the investment in the buildings and equipment necessary on site to enable its remaining use and progressive restoration, possibly justifying a slightly longer period for such activity. Having regard to all of the above considerations I conclude that a reasonable duration for the contracting activity would fall somewhere within a 10 – 15 year time frame. Taking a precautionary approach so as not to prolong adverse environmental effects in this area and to recognise the intention of the City Plan to progressively improve rural amenities and the quality of the rural environment I consider that consent duration of 12 years should be adequate to secure the completion of mineral extraction and rehabilitation on this site.
- 7.25 Gravel extraction from within the current site appears likely to be exhausted (at a reasonable rate of working) within five to ten years. I do not place any significant weight on Mr Blakely's indication that some arrangement may be entered into with the adjoining landowner to the east to enable some of that boundary to be worked beyond its present extent. Such an arrangement may or may not eventuate. If Blackstone Quarries Limited wishes to continue to operate its contracting business from this site then I believe it must also recognise its responsibilities to commit to the completion of the rehabilitation of the site following cessation of extractive activity.

Statutory considerations

- 7.26 Given the foregoing I am satisfied that for so long as permitted mineral extraction activities are being carried out on this site as it currently exists, then effects on the environment of operating the contracting depot in conjunction

with those activities will be similar to those permitted by the City Plan and of no more than minor effect in comparison. The application therefore satisfies at least one of the 'gateway' tests of s104D of the Act and can be considered subject to Part 2 of the Act against the matters set out in section 104.

- 7.27 The Regional Policy Statement (Part 12 Settlement and the Built Environment) and in particular Proposed Change Number 1 currently being processed seeks to confine industrial type activities to within a defined 'urban' boundary. While that Change is far from being determined at this stage it is indicative of an intention not to encourage the establishment of activities that detract from rural character of land on the outskirts of Christchurch so as to maintain the City's rural-urban contrast and rural amenity values.
- 7.28 Turning to consider the objectives and policies of the City Plan and in particular those dealing with 'Business', 'Non-rural activities' and 'Mineral extraction', the effects of the contracting operation would appear to be consistent with relevant objectives and policies only to the extent that it operates in conjunction with the permitted active working of minerals on this site and the rehabilitation of worked out areas for activities compatible with the surrounding rural environment (ref. City Plan Objective 13.4 and Policies 6.3.2; 13.1.4; 13.1.9;13.1.10; 13.2.1).
- 7.29 Section 5 of the Act is intended to enable the sustainable management of natural and physical resources while avoiding or mitigating adverse effects on the environment. The natural resource that identifies the primary activity in this location (mineral extraction) is finite. To prolong adverse effects on the environment beyond the natural working of that mineral resource would not constitute 'sustainable management' of those resources and would be contrary to the intentions of the Act, neither would extended contracting activity on this site maintain or enhance rural amenity values or the quality of the environment once mineral extraction activity ceases, contrary to section 7 of the Act.

8.0 Decisions

Land use

- 8.1 For all of the foregoing reasons and pursuant to sections 104, 104D and 108 of the Resource Management Act 1991, retrospective land use resource consent is granted for application reference RMA92010404 for the establishment and operation of a contracting depot, the storage of related machinery and bulk

materials in conjunction with permitted mineral extraction activities at 325 Old West Coast Road, Yaldhurst, subject to the following conditions:

General

1. The development shall proceed in accordance with the information submitted and plans lodged and entered into Council records as RMA92010404/1-9 inclusive.

Duration

2. The use of the land at 325 Old West Coast Road as a contractor's depot shall be discontinued upon the cessation of mineral extraction activity together with the related rehabilitation of this site for any consecutive period greater than 12 months in accordance with condition (4) below) or no later than 12 years from the date of this consent, whichever occurs first.

Re-location of contracting activities on site during mineral working

3. The consent holder shall within a period of 3 months following the date of this consent submit to the Team Leader, Enforcement Team of the City Council, a plan of the site indicating the proposed stages and timescales of working of the remaining mineral deposits on site and the intended consequential relocation(s) of contracting related activities (including concrete crushing) from those areas affected by that mineral working to other parts of the site.
4. Contracting activities shall be carried out in accordance with the plan required by condition 3 of this consent.

Site rehabilitation following contracting and mineral extraction activity

5. The consent holder shall within a period of 3 months following the date of this consent submit to the Team Leader, Enforcement Team of the City Council, a plan of the site consistent with that plan required by condition 3 of this consent and indicating the proposed stages and intended timescales of site filling and rehabilitation which shall thereafter be carried out in accordance with that plan so that upon completion the condition of the site will be sufficient to at least maintain a pastoral grassland cover.

Additive material from contracting activity

6. The importation, storage and processing on this site of demolition concrete associated with contracting activity shall only be for the production of roading materials that are to be comprised of at least 50% of gravels extracted from this site.

Hours of Operation

7. Operations associated with quarrying, the deposition of material, or the use or loading of mechanical processing equipment shall be confined to Mondays to Saturdays only, between 0700 and 1800 hours.
8. (i) Operations involving heavy goods vehicles movements, or loading or unloading such vehicles with contracting equipment or materials, shall be confined to:-
 - Mondays to Saturdays, between 0700 and 1800 hours.
 - Sundays, between 1200 and 1800 hours, on no more than 5 occasions in a calendar year.
- (ii) Any such operations on a Sunday shall be confined to a two hour period.
- (iii) To enable monitoring of the condition related to Sunday use of the site the consent holder shall keep a record of the occasions that the site is used on Sundays. Such records shall be made available to an Enforcement Officer upon request.

Activities

9. There shall be no processing or storage of green waste or vegetative material at the site.

Location of Activities

10. (i) Mechanical processing equipment shall be positioned at least 300 metres from the Rural 2 zone boundaries.
- (ii) All stockpiles shall be at least 50 metres from the Rural 2 zone boundaries.

Noise Control

11. Construction activities and associated noise emissions shall comply with the provisions of NZS 6803:1999 Acoustics – Construction Noise.
12. Except for the site's vehicle access point off Old West Coast Road, earthen mounding shall be provided along the northern and western site boundaries with the Rural 2 zone. Such mounding shall be continuous and at least 3 metres high and shall be vegetated.
13. Noise emissions from the site, when measured in accordance with NZS 6801:1991, shall not exceed the following levels.

Table 1: Applicable Noise Levels

	Noise level (dBA) at any position along the site's boundaries. (RuQ zone standard)
Mon. to Sat. inclusive: 1800 to 0700 the next day.	40 dBA L10 75 dBA Lmax
Mon to Sat inclusive: 0700 to 1800.	55 dBA L10 Lmax – n/a
Sundays (anytime).	40 dBA L10 75 dBA Lmax

14. (i) Before any mechanical plant to handle or process bulk material at the site is used other than for the purposes of commissioning the equipment or undertaking a noise assessment the consent holder shall present a report to the Team Leader of the Environmental Compliance Team. The report shall be prepared by a qualified and experienced acoustic consultancy, and shall certify that sound level measurements of mechanical processing equipment, and the associated loading and removal operations, comply with levels set out in Table 1.
- (ii) A further report shall be presented to the Team Leader of the Environmental Compliance Team if the position, or elevation, of mechanical plant to handle or process bulk material at the site is changed; or if different equipment is installed and used. The report shall be presented before such different or relocated equipment is used other than for the purposes of commissioning the equipment or undertaking a noise assessment. The report shall be prepared by a qualified and experienced acoustic consultancy, and shall certify that sound level measurements of the different or relocated mechanical processing equipment, and the associated loading and removal operations, comply with the levels set out in Table 1.
- (iii) Any report prepared pursuant to this condition shall include an assessment of the level of noise emissions when all equipment and vehicles that could operate at the same time do so.
- (iv) Any report prepared pursuant to this condition shall be prepared in accordance with NZS 6801 and NZS 6802: 1991.

Soil Contamination Controls

15. (i) The ground beneath any mechanical processing equipment requiring refuelling with liquid fuels shall be covered with a durable and impervious surface (a pad) that prevents ground contamination in the event of a spillage during refuelling.
- (ii) The pad shall be provided with upstands, and shall be constructed and maintained so as to contain 120% of the capacity of the appliance's fuel tank.
- (iii) The pad shall be provided with a means of drainage so that any accumulation of rainwater is readily removed. The means of drainage shall only be activated while under supervision for the purposes of rainwater drainage. Drainage of the pad shall not proceed if it is evident that fuel or oil is present. At all other times the means of draining the pad shall be inactive.
- (iv) The pad shall be kept free of accumulations of any material.

Vermin Control

16. (i) So as to prevent any harbourage or breeding of vermin that would be a nuisance pursuant to the Health Act 1956 the consent holder shall arrange for the site to be monitored, and any necessary vermin control undertaken by a full member of Pest Management Association of New Zealand.
- (ii) To enable monitoring of this condition the consent holder shall ensure that records of the monitoring dates, observations, and implementation of any control measures are maintained. Such records shall be made available to an Enforcement Officer upon request.

Vehicle access

16. The seal adjacent to and opposite the site access shall be widened, and acceleration and deceleration lanes shall be constructed in accordance with the diagram "Localised road widening and crossing treatment for accesses on rural roads with traffic generation between 30 and 100 vehicle movements per day" in Volume 3, Part 13, Appendix 7 of the City Plan.

Landscaping

17. The existing shelter belt hedge along the northern and western boundaries of the site shall be retained, and any existing gaps shall be planted with a similar species, with a minimum height at the time of planting of 1.8m.

18. The new planting outlined in condition 17 shall be undertaken within three months of the date of issue of this consent.
19. All landscaping required for this consent shall be maintained. Any dead, diseased, or damaged landscaping is to be replaced immediately with plants of a similar species.

Review

20. The Christchurch City Council may annually, on or about the last working day of November each year, serve notice of its intention to review the conditions of consent for the purposes of:
 - a. Dealing with any adverse effects on the environment which may arise from the exercise of the consent; or
 - b. Requiring the adoption of the best practicable option to remove or reduce the adverse effect on the environment; or
 - c. Complying with the requirements of the operative District Plan.

Advice Notes:

- Except for the capacity of fuel tanks associated with vehicles, no more than 2000 litres of class 3.3 (also known as class 3(c)) flammable liquids shall be stored on site. This classification includes petroleum oils (such as lubricants and waste oils) and diesel stored at the site. Generally, such storage and any associated handling facility should be installed in accordance with the City Plan's rules related to hazardous substances. Controls pursuant to the Hazardous Substances and New Organisms Act would also apply.
- The above conditions do not include a criterion related to dust emissions, or a requirement to develop and implement a dust control plan. It is expected that other consent conditions, administered by ECan, will apply with respect to the control of dust emissions.
- Fill brought onto the site shall comply with the Christchurch City Council's Cleanfill Bylaw. Soils, or any other material brought onto the premises, shall only be obtained from sites that are not potentially contaminated.
- Granting of this consent does not authorise any works on the legal road. A separate approval will be required from Council's Asset and Network Planning Team prior to carrying out any works on the legal road. Please

contact Weng-Kei Chen (Council Asset Policy Engineer) on 941 8655 to discuss this approval.

- Attention is drawn to the provisions of the Electricity Act 1992, which requires all land use activities to comply with the New Zealand Electrical Code of Practice for Electrical Safe Distances (NZECP 34:2001).
- All trees and vegetation planted on the site must comply with the Electricity (Hazards from Trees) Regulations 2003.
- Transpower NZ has a right of access to its existing assets situated adjacent to the site under S.23 of the Electricity Act 1992. Any development on the site must not preclude or obstruct this right of access. It is an offence under S.163(f) of that Act to intentionally obstruct any person in the performance of any duty or in doing any work that the person has the lawful authority to do under S.23 of the Electricity Act.



Hearing Commissioner
Christchurch City Council
March 10th 2009

Discharges

8.2 I consider that the proposed activity, subject to conditions, can be undertaken in a manner that is consistent with the Act's purpose of sustainable management of natural and physical resources. Having considered all the evidence and submissions together with the statutory documents and other matters I am required to consider under the Resource Management Act 1991, I determine that resource consent CRC081768 is granted for a term of 12 years to discharge contaminants to air from concrete crushing, soil screening, storage and handling of bulk materials and combustion of diesel oil, subject to the following conditions:

- (1) The discharge into air shall be only from the crushing of concrete, screening of soil, storage and handling of bulk materials and combustion products from a diesel-fired crusher and screening plant, at 325 Old West Coast Road, Yaldhurst, Christchurch at or about map reference NZMS 260 M35:6519 4459 (Lot 7 & 8 DP 26999).

- (2) (a) Each activity shall occur within the areas shown in Plan CRC081768 which forms part of this consent. The areas are defined as: Areas 3 and 4 – soil storage and screening; Area 5 – concrete crushing.
- (b) Notwithstanding Condition 2(a), concrete crushing and stockpiling of crushed concrete shall occur at least 100 metres from the western property boundary and at least 300 metres from the northern property boundary.
- (c) Notwithstanding Condition 2(a), soil screening shall occur at least 100 metres from the northern and western property boundaries and soil stockpiles shall be located at least 50m from the northern and western property boundaries.
- (3) The discharge shall not cause deposition of particulate matter or suspended particulate matter which is offensive or objectionable beyond the boundary of the property on which this consent is exercised.
- (4) A record of complaints relating to deposited or suspended particulate matter shall be maintained, and shall include:
- (a) The location where the particulate was detected by the complaint;
 - (b) The date and time when the particulate was detected;
 - (c) A description of the wind speed and wind direction when the particulate was detected by the complainant;
 - (d) The most likely cause of the particulate detected; and
 - (e) Any corrective action undertaken by the consent holder to avoid, remedy or mitigate the particulate detected by the complainant.
- This record shall be provided to the Canterbury Regional Council by 30 September each year, and otherwise upon request.
- (5) All existing shelter trees on Blackstone Quarries property shall be maintained and replaced when necessary.
- (6) Vehicles shall be limited to a speed of 15 kilometres per hour whilst on the site. A sign, capable of being read at a distance of five metres, shall be erected at the site entrance to inform all visitors of this requirement.
- (7) (a) The diesel powered concrete crusher and the diesel powered screening plant shall only be operating during the hours of 0700 and 1800 Monday to Saturday.

- (b) The engine output of the concrete crushing plant shall not exceed 228 kilowatts. The rate of concrete crushing shall not exceed 150 cubic metres per hour.
- (c) The engine output of the soil screening plant shall not exceed 150 kilowatts.
- (8) The consent holder shall adopt all practicable measures to prevent the emissions of fugitive dust, including, but not limited to, operating the sprinkler nozzles fitted on the crusher, the wetting down of stock piles and internal roadways, minimising drop heights when loading the crusher and screening plant, and ensuring all topsoil stockpiles are track rolled with an excavator.
- (9) (a) Operation of the concrete crusher and storage of crushed concrete shall occur below the natural ground level of the site at all times.
- (b) Water sprinkler nozzles on the crushing plant shall be operated at all times that concrete crushing occurs, in a manner that minimises dust discharges from crushing.
- (10) The storage of bulk materials on site shall not exceed at any one time:
- (a) 10,000 tonnes crushed concrete;
- (b) 20,000 tonnes river run gravel; and
- (c) 25,000 cubic meters of soil.
- (11) The stockpiles of bulk materials shall not exceed five metres in height.
- (12) The diesel engines of the concrete crusher and soil screener shall be regularly maintained to minimise contaminant emissions.
- (13) (a) Crushing of concrete and screening of soil shall not occur during winds from 45 degrees to 270 degrees, when the wind speed measured at the site exceeds 10 metres per second (36 kilometres per hour).
- (b) At all times during exercise of this consent, wind speed and wind direction shall be measured by an anemometer established on the site. The anemometer shall be installed at a height of at least three metres above ground level at a location exposed to the wind and free from any obstruction that has potential to significantly affect wind flow. Wind speed accuracy of measurement shall be within +/- 0.3 metres per second. The anemometer shall be established, located and operated to the satisfaction of the

Canterbury Regional Council. Wind speed and direction shall be continuously recorded with an averaging time for each parameter of not more than two minutes. These data shall be recorded using an electronic data logging system, shall be kept and shall be provided to the Canterbury Regional Council on request.

(14) (a) The consent holder shall prepare, maintain and comply with a "Dust Management Plan".

(b) The plan shall: (i) describe the operation of the site in relation to its impact on the environment; (ii) define the actions to be taken to ensure compliance with all conditions of this consent or in response to any incident that may impact adversely on the environment; (iii) identify the staff member responsible for each action; and (iv) include details of the steps to be taken to correct any element of non-compliance.

(c) The plan may be amended during the period of this consent as appropriate to improve dust management and contingency procedures. The plan and any revisions shall include the best practicable options for achieving compliance with the conditions of this consent.

(d) A copy of the current Dust Management Plan shall be kept in the consent holder's office on site at all times. A copy of the plan shall be provided to the Canterbury Regional Council within three months of the date of commencement of this consent and prior to the implementation of each revision.

(e) Where there is any conflict between the dust management plan and the consent conditions, these consent conditions shall prevail.

(15) The lapsing date for the purposes of section 125 shall be 31 December 2013.

(16) The Canterbury Regional Council may, on the last working day of September each year, serve notice of its intention to review the conditions of this consent for the purposes of:

(a) dealing with any adverse effect on the environment which may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or

(b) requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

A handwritten signature in black ink, appearing to read "John Jeli". The signature is written in a cursive style with a large initial 'J'.

Hearing Commissioner
Canterbury Regional Council
March 10th 2009

