

IN THE MATTER

of the Resource Management Act 1991

AND

IN THE MATTER

of an Application for Resource Consent

BY

CROMWELL CERTIFIED CONCRETE
LIMITED
Applicant

TO

CENTRAL OTAGO DISTRICT COUNCIL
Respondent

SUPPLEMENTARY STATEMENT OF EVIDENCE OF DEBORAH ANNE RYAN

[AIR QUALITY]

FOR THE CENTRAL OTAGO DISTRICT COUNCIL

DATED 17 DECEMBER 2021

1.0 INTRODUCTION

- 1.1 My full name is Deborah Anne Ryan. I am employed by Pattle Delamore Partners Limited (PDP) as a Technical Director for Air Quality. I have prepared this evidence, which is supplementary to my evidence dated 23rd November 2021 prepared for the Central Otago District Council CODC) for the resource consent application by Cromwell Certified Concrete Limited (CCCL) relating to the Amisfield Quarry. My qualifications and experience are as set out in my primary evidence.
- 1.2 My evidence was circulated with Mr Whyte's S42A report. At that point I had not formed a view on the effects of applicant's proposal on air quality because I considered there was a gap in the assessment provided with Mr Cudmore's review of BECA's original assessment and I had not undertaken a site visit.

2.0 SITE VISIT

- 2.1 In conjunction with Mr Van Kekam, I visited the CCCL Quarry on 30th November 2021. We observed the extraction, processing, storage and dust management activities within the existing operational quarry area. We also visited the expansion area, noting the locations and observing the neighbouring properties, in particular the Clark's, Little's (Amisfield Orchard Limited), Davis's, Manuka 50 and HLFT.

3.0 ASSESSMENT OF EFFECTS

- 3.1 Mr Cudmore's recommendations for improved management and monitoring of the quarry have now been supported by his detailed evidence. Having reviewed Mr Cudmore's evidence, participated in expert conferencing, and considering the current proposed condition set, my view is that effects on human health and nuisance amenity effects from quarry dust can be managed to an acceptable level.
- 3.2 My conclusion is based on the proposed mitigation and monitoring set out by Mr Cudmore and as captured in the current conditions, with the updates set out by Mr Van Kekam. In my view, the monitoring using PM₁₀ trigger values is central to ensuring proactive management by the applicant. The monitoring also provides an independent check that adequate controls are in place compared to historical application of control measures that solely relied on operator judgement.

- 3.3 My remaining concern is that the effects on the surrounding orchards are uncertain and could at times be significant. For this reason, I support additional conditions relating to video monitoring along with the PM₁₀ monitoring. I understand that video monitoring is not particularly onerous with current technology, and I consider that this additional monitoring would usefully provide independent verification of dust sources and whether the dust controls are being effective. The air quality experts' version of conditions has also recommended additional protection with works restricted during the most vulnerable periods within 100 metres and an investigate trigger level in addition to a stop work level for PM₁₀.
- 3.4 As stated in the Air Quality JWS, I support inclusion of a condition relating to a BPO assessment of a conveyor for pit run transportation to the central processing area. As Mr Cudmore indicated, removing sources of dust is a step change in quarry management and reduces the need for ongoing maintenance and management in applying dust control measures. In my view, conveyors are one such step change to reduce and remove the risk of dust from haul road traffic.
- 3.5 While the proposal to use clean reject has the potential to remove the haul road as a source of dust, my understanding is that this approach works best on non-trafficked areas. Mr Cudmore cited the Fulton Hogan Miners Road in Canterbury as an example where reject material is successfully used to eliminate dust from open areas. I note that Miners Road has a conveyor in place for pit run, which is to be extended into the expansion area. I note that conveyors are also proposed for the Royden quarry. For these reasons, in my view, formal consideration of a conveyor for the expansion area is warranted. My suggested wording the condition is:

Prior to commencing operations in the expansion area the consent holder shall undertake a Best Practicable Option (BPO) evaluation for installing and operating a conveyor to transport pit run material from the expansion area to the Central Processing Area (CPA). The report shall be subject to review by a suitably qualified and experienced practitioner (SQEP).

The BPO evaluation report shall be provided to the council six months prior to operations commencing in the expansion area. Depending on the outcomes of the report the council may initiate a review under Section 128 of the RMA to require the consent holder to adopt the BPO.

- 3.6 In the JWS, I indicated my agreement with Mr Van Kekam and Mr Stacey that a simplification of the ceasing work condition under high wind speeds was appropriate. We noted that there are always activities downwind in all directions, if you consider the existing quarry and expansion area. I have further considered this issue and am of the view that there are some wind directions where activities in some areas of the quarry footprint could continue with no sensitive activities closer than 250 m downwind. I agree that Mr Cudmore's proposed Condition 10, which provides for cessation of activities under high risk conditions and at high risk locations is therefore appropriate.
- 3.7 Regarding the extent of the buffer/setback, I agree that with the proposed mitigation and monitoring, and with consideration of the prevailing winds, that the effects of dust can be managed to an acceptable level. I recommend, however, that the set back around the Clark's storage facility and the AOL building platform at Mr Cudmore's receptor R6 should be extended to a 50 metre radius, as to be consistent with the Clarks' dwelling.
- 3.8 In response to the Commissioner's questions regarding separation distances at other quarries, my understanding is that the Fulton Hogan Royden quarry was granted with the nearest neighbour being 20 m from the extraction area boundary, but with a condition that there is an internal setback not to be quarried closer than 100 metres of the dwelling without the neighbour's approval.
- 3.9 For the Fulton Hogan Miner's Road extension, the nearest residence was 90 metres with a limitation set on quarrying within 200 metres to be restricted to winter months or with written approval. The general set back in other areas is 20 metres.
- 3.10 I have had the opportunity to discuss and review the proposed condition changes put forward by Mr Van Kekam and I am in general agreement with his recommendations.

Deborah Anne Ryan



17 December 2021