

BEFORE THE HEARING PANEL

IN THE MATTER of the Resource
Management Act 1991

AND

IN THE MATTER of the applications by Hirock
Limited to the Palmerston North City Council
(LU 6962) and the Manawatū -Whanganui
Regional Council (APP-2022203991.00) for
resource consents associated with the
expansion and operation of an existing
quarry at 167-257 Kendalls Line,
Palmerston North

EXPERT CONFERENCING

JOINT WITNESS STATEMENT – AIR QUALITY

28 June 2023

A. INTRODUCTION

1. This joint witness statement relates to expert conferencing on the topic of air quality.
2. This joint witness statement relates to resource consent applications lodged by the Hirock Limited (Applicant) to Palmerston North City Council (PNCC) and Manawatu-Wanganui Regional Council (Horizons), to be processed jointly, for the for the expansion of an existing quarry at 167 - 257 Kendall's Line, Palmerston North.
3. Specific expert conferencing was not held for this consent application. Rather, an agreed position has been developed between experts following the joint (PNCC and Horizons) hearing of the consent applications by Independent Hearing Commissioner David McMahon on 22 June 2023, and an agreed set of consent conditions have been developed.
4. The air quality experts involved with the development of this joint witness statement are:
 - a. Andrew Curtis for Horizons/PNCC;
 - b. Stuart Keer-Keer for the Applicant;

B. EXPERTISE

5. I, Andrew Ferguson Curtis, hold a Bachelor's degree in Chemical and Materials Engineering, a Post Graduate Certificate in Environmental Management, and a Post Graduate Diploma in Toxicology (Distinction). I am a member of the Clean Air Society of Australia and New Zealand and certified as an Air Quality Professional by that organisation, and I am also a certified Independent Hearings Commissioner. My role at PDP is Technical Director and I have over 35 years of engineering experience and has specialised in all aspects of air quality for over 25 years, including extensive experience in the assessment of dust from a wide range of quarries. My involvement to date in application is to review the air quality (dust) aspects of the Application and provide expert evidence at the joint hearing. While this consent is not before the Environment Court, I have read the Code of Conduct for Expert Witness, Section 9 of Practice Note 2023. Accordingly, I have complied with the Code in the preparation of this joint witness statement.
6. I, Stuart Frank Keer-Keer, am the Managing Director of K2 Environmental Limited. I hold a Master of Science (Chemistry) from the University of Auckland. I am a member of the Clean Air Society, Association of Independent Chemists, Source Evaluation Society. I have over 30 years of experience in air quality testing and assessments. My involvement to date in application is as technical advisor to Hirock (the Applicant). I co-authored the Dust Management and Monitoring Plan

and the Dust Monitoring Report and provided expert evidence at the joint council hearing. While this consent is not before the Environment Court, I have read the Code of Conduct for Expert Witness, Section 9 of Practice Note 2023. Accordingly, I have complied with the Code in the preparation of this joint witness statement.

C. PURPOSE AND SCOPE OF JOINT WITNESS STATEMENT

7. The purpose of this joint witness statement is to identify, discuss and highlight points where there is agreement or disagreement on matters pertaining to air quality effects arising from the resource consent applications, the submissions on them and the joint (PNCC and Horizons) s42A reports, expert evidence and the hearing held on 22 June 2023.
8. As directed by Independent Hearing Commissioner David McMahon in his Minute #2 on 26 June 2023, a set of agreed consent conditions has been prepared, and are attached at Annexure B.

D. PRIMARY DATA RELIED ON

9. The following documents, data and information have been relied on in this expert conference:
 - a. Good Earth Matters Limited – Linton Quarry Expansion: Resource Consent Application and Assessment of Environmental Effects for Joint Application to Palmerston North City Council and Horizons Regional Council (the Application);
 - b. Letter from Good Earth Matters Limited on behalf of Hirock to Natasha Adsett, Response to S92 Further Information Request, dated 21 November 2022;
 - c. Letter from Good Earth Matters Limited on behalf of Hirock to Natasha Adsett, Response to S92 Further Information Request, dated 22 December 2022;
 - d. Good Earth Matters, Dust Monitoring Assessment Proposal, dated March 2023;
 - e. Good Earth Matters, Response to Monitoring Questions, dated 4 May 2023;
 - f. Report on and Minutes of the Prehearing Meeting, prepare by Andrea Harris, dated 17 May 2023;
 - g. Dust Management and Monitoring Plan, prepared by K2 Environmental Limited, report number Y0135, dated 1 June 2023, Draft 1;

- h. Dust Monitoring Report, prepared by K2 Environmental Limited, report number Y0135, dated 1 June 2023, Issue 1;
- i. Air Quality Review of Linton Quarry Application on behalf of Palmerston North City Council, dated 24 May 2023, prepared by PDP;
- j. Section 42A RMA report by Natasha Adsett (PNCC/Horizons), dated 30 May 2023;
- k. Statement of Evidence by Stuart Frank Keer-Keer on behalf of Hirock, dated 6 June 2023;
- l. Supplementary Air Quality Review of Linton Quarry Application, dated 19 June 2023, prepared by PDP;
- m. Written submissions by Vautiers, Days and Bekkers tabled at the joint hearing on 22 June 2023; and
- n. Revised consent conditions by the Applicant, tabled at the joint hearing on 22 June 2023.

E. AGREED ISSUES

- 10. Refer to Annexure A

F. DISAGREEMENT AND REASONS

- 11. Nil.

Date: 28 June 2023



Andrew Curtis



Stuart Keer-Keer

ANNEXURE A

IN THE MATTER of applications by of the applications by Hirock Limited to the Palmerston North City Council (LU 6962) and the Manawatū -Whanganui Regional Council (APP-2022203991.00) for resource consents associated with the expansion and operation of an existing quarry at 167-257 Kendalls Line, Palmerston North.

Expert conferencing – Air Quality

Participants: Andrew Curtis and Stuart Keer-Keer

No	Topic/Issue	Statements	Agreed position	Disagreements and reasons
1	Receiving Environment	The experts consider that the application correctly describes the receiving environment including the sensitive location nearest to the quarry.	We agree	Nil
2	Potential Dust Sources	The experts consider that given the location of the quarry, and the small scale of activities that occur within it there is little potential for dust from quarry activities to give rise to nuisance effects. However, the experts consider that there is potential for dirt tracked out of the site to give rise to visible dust and potentially cause nuisance effects if it is present in sufficient quantities and disturbed by vehicle movements.	We agree	Nil
3	Submitter Concerns	In terms of air quality the main concerns raised by the submitters were nuisance dust which they attributed to dust be disturbed by traffic movements and effects associated with diesel fumes from quarry traffic. The experts consider that there is little potential, given the relatively small volume of traffic for traffic exhaust related effects to occur at these residences. The experts did not observe Kendalls Line before it was resealed and therefore cannot be categorical about road dust causing nuisance. However we agree that if there were sufficient dust on the road that this could be a source of dust.	We agree	Nil
4	Dust Management	The experts consider that in general dust appears to be well controlled by the quarry, and that these are well described in the draft DMMP. Subject to the installation of a truck wheel wash and road cleaning measures between the weigh station and the beginning of Kendalls Line legal road, and appropriate updates to the management methods described in the Draft DMMP, dust from the quarry, including dust from quarry traffic will be acceptable. We have suggested amendments to the consent conditions to capture the installation of the wheel wash.	We agree	
5	Monitoring Methodology	The experts consider that the monitoring methodology set out in the draft DMMP is appropriate, and that the compliance monitoring should be undertaken at the site boundary. We do not consider that it is necessary to have a condition requiring monitoring near the residents as if effects are control, however there is no reason why Hirock cannot undertake additional monitoring if it wanted to.	We agree	Nil

		<p>We have suggested a consent condition to require the monitoring and have suggested a location for the monitoring.</p> <p>We have also agreed on a six-month monitoring period over the dryer months (1 November to 30 April) for three years and modified the conditions to reflect this.</p>		
6	Effects Assessment	<p>It is our opinion that there is little potential for the quarry to cause dust nuisance effects, and with the changes to the conditions that we have recommended, the potential for dust nuisance from traffic movements on Kendalls Line will also be reduced.</p>	We agree	Nil
7	Proposed Consent Conditions	<p>We have recommended changes to the conditions tabled at hearing.</p>	An agreed set of consent conditions is attached at Annexure B.	Nil

ANNEXURE B

1. There must be no discharge of airborne particulate matter that is objectionable to the extent that it causes an adverse effect at or beyond the boundary of the subject property.
2. The Consent Holder must ensure that a water truck/tank, in serviceable condition and able to be used to dampen dust in accordance with their Dust Monitoring and Management Plan, is available on-site at all times.
3. The Consent Holder must install a wheel wash within six (6) months of the commencement of the consent and the site must be configured so that all trucks exiting the site pass through it. The wheel wash must be maintained at all times.
4. The Consent Holder must ensure that dust producing plant (e.g. crushers and shaker screens) have sprinklers or other dust mitigating mechanisms in place at all times.
5. The Consent Holder must provide the Palmerston North City Council with a Dust Monitoring and Management Plan (DMMP) for technical certification. The DMMP must include but not be limited to:
 - a. A description of the activity including:
 - i. site layout,
 - ii. the nature of any earthworks, quarrying stages, and
 - iii. location of overburden disposal.
 - b. Identification of any residential dwellings or other sensitive receptors within 100 metres of the site boundary.
 - c. A description of the sources of dust and the dust management methods that will be applied, including any specific mitigation measures if sensitive receptors are located within 200 metres of the property boundary, including for example:
 - i. Use of water dust suppression on crushing and screening equipment;
 - ii. Use of watercarts and/or pea gravel on unsealed haul roads and the area of the site accessible by the public;
 - iii. On site speed limits;
 - iv. Sealing of site accessways;
 - v. Monthly sweeping/washing of sealed portions of the site roads and yards and the public road up to the entrance of 150 Kendalls Line; and
 - vi. Use of wheel wash.
 - d. Dust management responsibilities for site staff.
 - e. Dust complaint investigation and response procedures.
 - f. Methods that will be used to monitor dust (as PM10) and wind for dust management including but not limited to:
 - i. A description of the monitoring equipment
 - ii. A description of the maintenance of the monitoring equipment
 - iii. A description of the location of the monitoring equipment at the western boundary of the quarry within 10 metres of Kendalls Line.
 - iv. A description of how monitoring data will be used to trigger dust control if concentrations exceed the following limits:
 - Threshold Concentration: 50 µg/m³ (24-hour mean)
 - Permissible Excess: One 24-hour period in any 12-month period
 - v. A description of how data from the monitoring equipment will be reported to the Consent Holder and how information will be stored.
 - g. A description of where the meteorological monitor is located, how the data is logged, and how staff are alerted to wind speeds being over 10 m/s.
 - h. A description of the contingency measures that will be used to control dust if the monitoring data exceeds the concentration limits specified in (f)(iv) above.
 - i. A description of how monitoring data will be provided to the Palmerston North City Council.
 - j. Processes for review and updating of the DMMP, including provision of updates to the regulatory authority for its approval.
6. The DMMP must be submitted to the Palmerston North City Council's Enforcement and Monitoring Officer for technical certification at least twenty (20) working days before works commence on the site. Palmerston North City Council may undertake the review in consultation with the Manawatu-Wanganui Regional Council in regard to the compliance, or otherwise, with the One Plan, particularly rule 15-14.

Advice Note: the intent of this condition is for PNCC to undertake the technical certification of the plan, and they may choose to seek advice or feedback from the Manawatu-Wanganui Regional Council as part of this process.
7. Certification (or withholding certification) is based on the Palmerston North City Council's assessment of whether the DMMP meets the requirements of the conditions of this resource consent, with specific focus on **Condition 5**.
8. The Consent Holder must operate the quarry in compliance with the certified DMMP at all times.

9. The DMPP may be amended or updated without the need for certification where the amendment is an administrative change, including nominating personnel.
10. Except as provided for in **Condition 9**, amendments to the DMMP and any appendices must be certified in writing by the Palmerston North City Council acting in a technical certification capacity prior to the commencement of any works to which the amended DMMP relate.
11. The Consent Holder must carry out on an annual basis six months of real time PM10 monitoring at the western boundary of the quarry within 10 metres of Kendalls Line after 1st November and before 30th April, for the first three (3) years following the grant of the consent to determine the extent of any nuisance dust effects from the quarry including quarry traffic along Kendalls Line.
12. To monitor compliance with **Condition 11**, the consent holder shall continuously measure the following parameters to obtain 1 hour and 24-hourly averages:
 - a. Particle Concentration -
 - i. PM10 and
 - ii. the total dust load,
 - b. Time lapse video.
 - c. Meteorological data (wind speed, wind direction and rainfall).
13. If, after three years, the monitoring required by **Condition 11** demonstrates there are no nuisance dust effects from the quarry including quarry traffic along Kendalls Line, then dust monitoring need only be carried out in accordance with the approved Dust Management and Monitoring Plan, or when two (2) or more substantiated complaints are received by the Consent Holder, Palmerston North City Council or Manawatu-Whanganui Regional Council within a 12-month period.
14. An annual report shall be provided to the Palmerston North City Council with the results of the monitoring required by **Conditions 11 and 13** and any remedial actions undertaken by the Consent Holder.

Advice Note: Palmerston North City Council may choose to provide the annual report to Manawatu – Whanganui Regional Council in regard to the compliance, or otherwise, with the One Plan, particularly rule 15-14.
15. Following the receipt of results of the monitoring required by **Conditions 11 and 13**, if it is shown that the site is generating concentrations of PM10 that are greater than 50 µg/m³ (24-hour mean), the Palmerston North City Council may request in writing that the consent holder provide a report, prepared by a suitable qualified person, which investigates options for controlling dust from the site.
16. The consent Holder shall implement the recommendations of the report within six months of the report being finalised and provide an updated version of the DMMP as per **Condition 15**.

QUARRY MANAGEMENT PLAN

17. The consent holder must update the Quarry Management Plan twelve (12) months after the grant of this consent and submit it for Technical Certification by PNCC. The updates must include but not be limited to:
 - a. Updated description of site activities
 - b. Updated description of cultural values of the site
 - c. Reference to Ecological Management Plan
 - d. Reference to Traffic Management Plan
 - e. Reference to Memorandum of Understanding with Rangitāne o Manawatū
 - f. Reference to Memorandum of Understanding with PNCC for the on-going maintenance of Kendalls Line
 - g. Reference to the Dust Management and Monitoring Plan
 - h. Updated noise monitoring requirements
 - i. Updated Erosion and Sediment Control Plan requirements
 - j. Cleanfill record keeping procedures
 - k. Updated regulatory framework i.e., resource consents
 - l. Updated driver induction

Advice Note: the requirement for Technical Certification of the Quarry Management Plan is also contained within the Manawatū-Whanganui Regional Council consents ATH-2022205663.00, ATH-2022205664.00 and ATH-2023205983.00

REVIEW

18. The Palmerston North City Council, under s128 of the Resource Management Act, may once per year, during July, serve notice of its intention to review all conditions of this resource consent for the purpose of reviewing the effectiveness of these conditions in avoiding and mitigating any adverse effects on the environment. The review of conditions must allow for:
 - a. deletion or amendments to any conditions of this resource consent to ensure adverse effects (including noise and dust) are appropriately mitigated, and/or
 - b. addition of new conditions as necessary, to avoid, remedy or mitigate any unforeseen adverse effects on the environment.