

Calga Sand Quarry

Noise Monitoring Program

incorporating a

Noise Monitoring Protocol

Prepared by:
W. CORKERY & CO. PTY. LIMITED

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Noise Monitoring Program

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Noise Monitoring Protocol

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December 2005 Ref No. 264/26b

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1 INTRODUCTION

It is recognised that the operation of the Calga Sand Quarry ("the quarry") has the potential to impact on the noise environment beyond the boundaries of the Project Site. To manage the potential impact on the local noise climate, and in compliance with *Condition 3(7)*¹ of Development Consent DA 94-4-2004 ("the Consent"), the following Noise Monitoring Program (NMP) has been prepared.

The NMP includes a Noise Monitoring Protocol (NMPr) to evaluate compliance with the noise criteria identified by D A 94-4-2004 (see Section 3.2). Section 4 presents the specific features of the NMP including monitoring locations, parameters measured and frequency of monitoring.

2 CONSENT REQUIREMENTS

The Consent for the quarry incorporates a total of nine conditions relating to noise, noise management and noise monitoring. These conditions are presented in full in **Box 1**. It is noted that a number of conditions arose from the DEC's recommendations to the DoP and as such will be consistent with the conditions of the EPL 11295.

Schedule 3 Impact Assessment Criteria

2. The Applicant shall ensure that the noise generated by the development does not exceed the criteria specified in Table 1.

Table 1: Noise impact assessment criteria dB(A) L_{Aeq (15 min)}

Residential Location	Day	Evening	Night	Night (L _{A1(1min)})
Gazzana (Residence 3)	41	35	35	45
King	40	35	35	45
Kashouli	39	35	35	45
Other residences	35	35	35	45

Notes:

- The noise criteria do not apply where the Applicant and the affected landowner have a valid agreement in regard to noise from the development, and a copy of the agreement has been forwarded to the Director-General and DEC. In this case the Applicant may exceed the noise limits in Table 1 in accordance with the noise agreement.
- Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise limits in the above table. Where it can be demonstrated that direct measurement of noise from the development is impractical, the DEC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- Noise from the premises is to be measured at 1m from the dwelling façade to determine compliance with the L_{A1(1 minute)} noise limit.
- The criteria above apply to noise emissions under the following weather conditions:
 - wind speed up to 3 m/s at 10m above ground level; or
 - temperature inversion conditions of up to 3ºC/100m and wind speed up to 2m/s at 10m above ground level.

Box 1
Noise Related Consent Conditions

¹ Hereafter all identified conditions refer to DA 94-4-2004, the Consent.



Land Acquisition

If the noise generated by the development exceeds the criteria in Table 1 by more than 5 dB(A), then
the

Applicant shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 8-10 of schedule 4, unless there is a valid noise agreement between the Applicant and an affected landowner.

Noise Mitigation

4. Prior to carrying out any extraction, the Applicant shall construct an acoustic barrier in accordance with the quarry design in the Amendment Report (as reproduced in Appendix 1), to the satisfaction of the Director-General. The construction of the acoustic barrier must be completed within 4 weeks.

Operating Hours

5. The Applicant shall comply with the operating hours in Table 2:

Table 2: Operating Hours

Activity	Day	Time
Extraction and processing	Monday – Friday	7:00am to 6:00pm
	Saturday	7:00am to 4:00pm
	Sunday and Public Holidays	Nil
Delivery and Distribution	Monday – Friday	5:00am to 10:00pm
	Saturday	5:00am to 4:00pm
	Sunday and Public Holidays	Nil
Maintenance (if inaudible at neighbouring residences)	Anytime	Anytime

Notes:

- Construction activities, such as the construction of the acoustic barrier, shall only be carried out between 7:00am to 6:00pm Monday to Friday, and 8:00am to 1:00pm on Saturdays. No construction activities are to be undertaken on Sundays or Public Holidays.
- 6. The following activities may be carried out at the premises outside the hours specified in Table 2:
 - the delivery of materials as requested by Police or other authorities for safety reasons; and
 - b) emergency work to avoid the loss of lives, property and/or to prevent environmental harm. In such circumstances the Applicant shall notify DEC and affected residents prior to undertaking the works, or within a reasonable period in the case of emergency.

Noise Monitoring Program

7. Prior to carrying out any development, the Applicant shall prepare, and subsequently implement, a Noise Monitoring Program for the development, in consultation with DEC, and to the satisfaction of the Director-General. This program must include a combination of attended and unattended noise monitoring, and a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this consent.

Land Acquisition - Schedule 4

- 8. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant shall make a binding written offer to the landowner based on:
 - a) the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the development, having regard to the:
 - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
 - presence of improvements on the property and/or any approved building or structure which
 has been physically commenced at the date of the landowner's written request, and is due to
 be completed subsequent to that date;

Box 1 (Cont'd)
Noise Related Consent Conditions



- b) the reasonable costs associated with:
 - relocating within the Gosford local government area, or to any other local government area agreed to by the Director-General; and
 - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and
- c) reasonable compensation for any disturbance caused by the land acquisition process.

However, if at the end of this period, the Applicant and landowner cannot agree on the acquisition price of the land, and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.

Upon receiving such a request, the Director-General shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or terms upon which the land is to be acquired.

If either party disputes the independent valuer's determination, then the independent valuer should refer the matter back to the Director-General.

Upon receiving such a referral, the Director-General shall appoint a panel comprising the:

- appointed independent valuer (or alternative appointed by the President of the NSW Division of the Australian Property Institute);
- (ii) Director-General and/or nominee/s; and
- (iii) President of the Law Society of NSW or nominee,

to consider submissions from both parties, including meeting with the parties individually if requested, and to determine a fair and reasonable acquisition price for the land, and/or the terms upon which the land is to be acquired.

Within 14 days of receiving the panel's determination, the Applicant shall make a written offer to purchase the land at a price not less than the panel's determination.

If the landowner refuses to accept this offer within 6 months of the date of the Applicant's offer, the Applicant's obligations to acquire the land shall cease, unless otherwise agreed by the Director-General.

- 9. The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, panel, or the Director-General and the costs of determination referred above.
- 10. If the Applicant and landowner agree that only part of the land shall be acquired, then the Applicant shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision, and registration of the plan at the Office of the Registrar-General.

Box 1 (Cont'd)
Noise Related Consent Conditions

3 NOISE MONITORING PROTOCOL

3.1 Introduction

An environmental impact assessment was undertaken for the proposed extension to the quarry prior to the granting of development consent and this NMPr has been designed to reflect the commitments incorporated within that assessment (including an EIS dated May 2004 (RWC, 2004) and a subsequent Amendment Report dated June 2005 (RWC, 2005)). The NMPr has been prepared with reference to relevant legislation and guidelines to address the following matters relevant to the management of noise produced within the quarry.

- Noise compliance criteria (see Section 3.2).
- Noise controls and mitigation measures (see Section 3.3).
- Community consultation (see Section 3.4).

- Management of complaints (see Section 3.5).
- Monitoring methods and programs (see Section 3.6).
- Response to noise compliance criteria exceedance (see Section 3.7)

3.2 Noise Compliance Criteria

Noise compliance criteria for the operation of the quarry, as incorporated in *Condition 3(2)*, have been established using relevant DEC guidelines. Rocla will ensure the noise generated by the quarry does not exceed these criteria as reproduced in **Table 3.1**.

Table 3.1

Noise Impact Assessment Criteria dB(A)²

Residential Location	Day	Evening	Night	Night	
	L _{Aeq (15 mins)}	L _{Aeq (15 mins)}	L _{Aeq (15 mins)}	(L _{A1(1min)})	
Gazzana (Residence 3)	41	35	35	45	
King	40	35	35	45	
Kashouli	39	35	35	45	
Other residences	35	35	35	45	
Source: Modified after DA 94-4-2004 – Table 1					

3.3 Noise Controls and Mitigation Measures

Design Features

The following features have been incorporated into the design of the quarry.

(i) In their existing location the noise generated by the processing plants will continue to be mitigated through the placement of product stockpiles around the plant. Additional hoardings will be constructed around the wash plant in its current location if insufficient product is available to maintain the stockpiles shielding the wash plant.

Noise from the premises is to be measured at 1m from the dwelling façade to determine compliance with the $L_{A1(1 \text{ minute})}$ noise limit. The criteria above apply to noise emissions under the following weather conditions:

temperature inversion conditions of up to 3°C/100m and wind speed up to 2m/s at 10m above ground level.



The noise criteria do not apply where the Applicant and the affected landowner have a valid agreement in regard to noise from the development, and a copy of the agreement has been forwarded to the Director-General and DEC. In this case the Applicant may exceed the noise limits in Table 1 in accordance with the noise agreement.

Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise limits in the above table. Where it can be demonstrated that direct measurement of noise from the development is impractical, the DEC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.

[•] wind speed up to 3 m/s at 10m above ground level; or

(ii) The processing plants will be relocated during extraction from Stage 3/2 to the floor of the existing quarry, thereby providing considerable shielding for both plants and the noise from haul trucks travelling to and from the plants.

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- (iii) An acoustic barrier will be constructed around the northern, eastern and western perimeters of the Stage 3 extraction area will be 7m in height and comprise a 5m earth bund and 2m fence. The acoustic barrier would be constructed within 4 weeks prior to any extraction occurring.
- (iv) The long term haul road has been positioned close to the southern boundary and most distant from the closest surrounding residences.
- (v) The hopper for the wash plant will be elevated at approximately 202m AHD or 15m to 20m below the topography on the perimeter of the Quarry site in the direction of surrounding residences. This revised location will noticeably reduce noise from haul trucks delivering raw feed to the wash plant.

Operational Procedures

Rocla will adopt the following range of operational procedures to collectively contribute to the control of noise at surrounding residences.

- (i) All hours of operation identified by Condition 3(5) will be strictly observed ie. no trucks or equipment will enter or leave the quarry site before 5:00am or after 10:00pm and only low noise maintenance would be undertaken after 10:00pm.
- (ii) Extraction activities will only be undertaken within the hours of operations identified by *Condition 3(5)* (see **Box 1**), ie. 7:00am to 6:00pm Monday to Friday and 7:00am to 4:00pm on Saturday.
- (iii) All equipment used on site will be regularly serviced to ensure the sound power levels of each item remains at or below the level nominated in **Table 3.2**.
- (iv) Rocla will continue to specify to all truck drivers during their site induction that engine breaks should not be used on the quarry site or when approaching the site entrance.
- (v) The on-site road network will be periodically graded to limit body noise from empty trucks travelling on internal roads.
- (vi) The volume of reversing alarms will adjustable with three settings. The default setting will be the quietest and the volume only increased in situation where surrounding noise levels in close proximity to the vehicle is such that a sound level increase is warranted for safety reasons.

Table 3.2

Modelled Equipment and Sound Power Levels

Area	Equipment	Sound Power Level, dB(A)	Comments			
Sand Extraction	Bulldozer	115	Measured on site			
	Front-end Loader	104	New FEL as measured on site			
	Haul Truck	106	New truck as measured at Rutherford			
Mortar Sand Plant (Powerscreen 510)	Total sound power level including noise from hopper screen, conveyors and motor	102	Measured on site			
Wash Plant	Total sound power level including noise from screen, all hoppers and cyclone tower	106	Measured on site			
Product	2 x Front-end Loaders	104	New FEL as measured on site			
Transportation	2 x Road Trucks (in motion) 1 Road Truck (idling)	103 95	Measured on site, laden			
Source: Wilkinson Murray (2004) – Table 4-2						

3.4 Community Consultation

Rocla is keen to maintain a positive dialogue with all members of the local community to avoid any adverse impacts and/or misunderstandings arising from its activities. Consultation will be undertaken in one of two ways.

- 1. Direct contact with those members of the local community with the greatest potential to be impacted by activities within the quarry.
- 2. Establishment and involvement in a Community Consultative Committee (CCC) as required by *Condition 5(8)*. The CCC is comprised of:
 - two Rocla representatives, including the person responsible for environmental management of the quarry;
 - one representative from Gosford City Council; and
 - at least two representatives from the local community.

The appointment of the nominated representatives will meet the approval of the Director-General of the Department of Planning in consultation with Gosford City Council.

The CCC will be chaired by an independent chairperson, whose appointment has also been endorsed by the Director-General, meet at least twice a year, and review the environmental performance of the quarry.

Rocla will ensure that the CCC is provided with the most up-to-date information on the environmental performance of the quarry and respond to any comments made by representatives of the CCC.

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3.5 Management of Complaints (Complaints Management Protocol)

Whilst all endeavours will be made by Rocla to avoid adverse impacts on the local environment and to local residents, it is acknowledged that from time to time such impacts may occur. To ensure an appropriate and consistent level of reporting, response and follow-up to any complaints is adopted by Rocla, the following complaints management protocol will be followed.

- Each complaint received will be recorded on a Complaints Register. The Register will include the details of the complainant, type of complaint (eg. excessive dust generation), and the date and time received.
- The Quarry Manager will be responsible for addressing the complaint as well as the necessary measures required to address the complaint.
- Once the identified measures are undertaken, the Quarry Manager will sign off on the relevant Complaints Register.
- If necessary, follow-up monitoring will take place to confirm the source of the complaint is adequately mitigated.
- A copy of the Complaints Record Sheet will be kept by Rocla and made available to the CCC and the complainant (on request). A summary of complaints received (if any exist) will be presented to each CCC meeting and reporting in the relevant AEMR.
- A copy of the Complaints Register will be provided to EPA with the Environmental Protection Licence Annual Return

Based on the nature of the complaint, specific contingency measures will be implemented to the (reasonable) satisfaction of the complainant. The Quarry Manager retains ultimate responsibility to ensure that complaints received are properly recorded and addressed appropriately.

3.6 Monitoring Methods and Programs

Section 4 presents the noise monitoring methods and procedures including details on monitoring locations, methods, frequency, parameters and reporting.

3.7 Response to Impact Assessment Criteria or Objectives Exceedance

On identification of an exceedance of the noise compliance criteria presented in Section 2.5, the following protocol is to be followed.

1. Confirmation of Exceedance

(a) The consultant responsible for the monitoring will be contacted to ensure no error has been made in recording or analysing the result. Should this investigation conclude the treatment, analysis and result recording for the site are satisfactory, Rocla will proceed to response point 2.

2. Notification (of exceedance)

Exceedance $\leq 5dB(A)$ over criteria:

The Quarry Manager will be informed who, within 7 days, will notify the affected land owner or resident, the Director-General of the Department of Planning and the DEC as to the nature of the exceedance(s). Exceedance of noise compliance criteria will require the preparation of a corrective action plan.

The land owner, the Director-General of the Department of Planning and the DEC will be provided with detailed information as to the proposed corrective actions to be taken (see response step 3). If requested by the Director-General of the Department of Planning, Rocla will commission an independent consultant to undertake an independent review of the operations and noise related impact with any recommendations incorporated into the corrective action plan (see response step 3).

Exceedance > 5dB(A) over criteria:

The Quarry Manager will be informed who, within 7 days, will notify the affected land owner or resident, the Director-General of the Department of Planning and the DEC as to the nature of the exceedance(s). If requested by the Director-General of the Department of Planning, Rocla will commission an independent consultant to undertake an independent review of the operations and noise related impact. The results of the independent review will be used as the basis for establishing a mutually acceptable position between Rocla and the affected land owner. This may involve the initiation of a comprehensive corrective action plan (see response step 3), the preparation of a negotiated agreement between the affected land owner and Rocla over continuing exceedance of noise criteria (see response step 4) or the initiation of land acquisition procedures (see response step 6).

3. Corrective Action

- (a) Noise from the monitoring site from which the exceedance was recorded will be re-monitored. A compliant result following reassessment will be considered a sufficient response, however, the monitoring point and parameter will be noted for reference in the event a future exceedance is recorded. In the event the remonitoring returns a second non-compliant result, Rocla will proceed to response step 3(b).
- (b) Rocla will prepare a comprehensive plan of action to return the operation to compliance. The plan of action will document the corrective measures to be undertaken, to whom the responsibility for undertaking these lies, the frequency or scale of these and the results expected through their implementation. Preparation of the corrective action plan may require the assistance of a specialist acoustic consultant. Details on preparation of the corrective action plan, will be included in the relevant AEMR and Environment Protection Licence Annual Return and to the DEC prior to implementation, if requested.

(c) As noted in response step 1, the land owner / resident will be notified of this corrective action plan.

4. Reassessment, Ongoing Consultation and Negotiated Agreement Development

During and following the implementation of the corrective action plan, the Quarry Manager will consult regularly with the affected land owner / resident to determine the success of the corrective actions. Noise at the offending location will be re-monitored during and following the implementation of the corrective action plan in order to demonstrate a return to compliance. As a minimum, Rocla will provide quarterly monitoring results to the affected land owner / resident (and the DEC) until the results illustrate a return to compliance.

In the event that noise levels continue to exceed the nominated criteria at a residence, Rocla will attempt to develop a negotiated agreement with the land owner whereby, compensatory measures are offered to the land owner in return for signed acceptance of the noise criteria exceedance. The agreement will generally specify a non-compliant noise level, above which the agreement becomes null and void.

5. Notification (of compliance / negotiated agreement)

Rocla will notify the affected land owner, the DEC and other relevant government agency(ies) and local stakeholder(s) of the return to compliance following the successful implementation of a corrective action plan, or the establishment of a negotiated agreement between Rocla and the affected land owner(s).

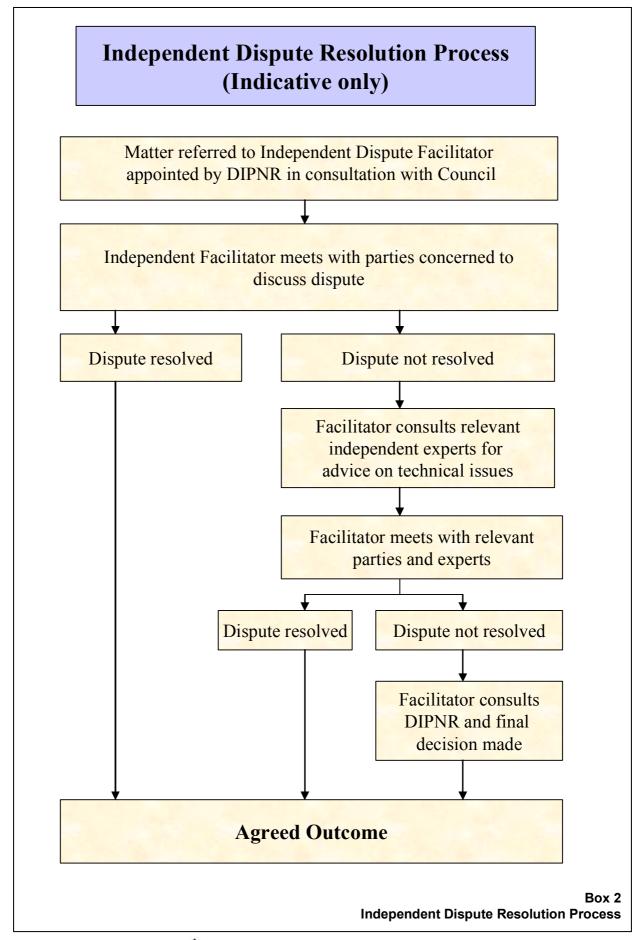
6. Continued Non-Compliance and Land Acquisition

In the event of a continued exceedance of noise criteria and where Rocla is unable to obtain a negotiated agreement with the affected landowner, Rocla will either:

- (a) refer the situation to the Director-General of Department of Planning and an Independent Dispute Resolution Process is commenced as noted in Condition 4(4) (see **Box 2**);
- (b) commence land acquisition proceedings with the affected landowner as identified in Conditions 4(8-10).

7. Reporting

The recorded exceedance, corrective actions and reassessment will be reported to the CCC and included in each relevant AEMR and the Environmental Protection Licence Annual Return.



3.8 Responsibilities and Accountabilities

Throughout the operational life of the quarry, the Quarry Manager will have overall responsibility for ensuring contractors, employees and service providers comply with all laws, regulations, licences, approvals and conditions of the consent.

All persons undertaking any form of work on the site will be required to attend a site-specific induction, at which they will be instructed in the environmental rules, procedures and processes applicable to their activities whilst they are on the site including those required to limit noise to acceptable levels.

4 MONITORING AND REPORTING

4.1 Introduction

Rocla will undertake sufficient monitoring to establish that noise generated by its activities is not of concern to the surrounding residents of the quarry and that the measured levels are compliant with the noise compliance criteria established and provided in Section 2.2. **Table 4.1** tabulates all relevant information for the Noise Monitoring Program.

Table 4.1

Noise Monitoring Program and Criteria

	Location *	Criteria				Eroquonov / Timing of
Purpose		cation * Day	Evening	Night	Construction	- Frequency / Timing of Monitoring
		L _{Aeq(15min)}	$L_{Aeq(15min)}$	L _{A1 (1 minute)}	L _{Aeq(15min)}	
	CN-1	41	35	35	56	
Noise	CN-2	40	35	35	55	quarterly attended monitoring and yearly unattended monitoring
Compliance Monitoring	CN-3	39	35	35	56	
	CN-4	35	35	35	50	
Noise Prediction Validation	CN-5	35	35	35	55	Within 2 weeks of the commencement of construction and each extraction stage to validate predictions made in the Amendment Report*

^{*} See Figure 2.1 for noise monitoring site locations.

In the event, noise monitoring validates Amendment Report predictions, this monitoring will be sufficient. Should monitoring results invalidate Amendment Report predictions, CN-5 will be include in quarterly monitoring schedule.

4.2 Monitoring Locations

The following noise monitoring sites have been established for the measurement of construction and operational noise at residences surrounding the quarry (see **Figure 4.1**). **Table 4.2** presents a summary of these locations.

Table 4.2Noise Monitoring Locations

Ref:*	Location				
	Easting	Northing	Description		
CN-1 334140 6301840 Adjacent to the Gazzana residence (Res			Adjacent to the Gazzana residence (Residence 3) on Lot 121, DP755221.		
CN-2	Adjacent to the King residence (Residence 4) on Lot 143, DP755246.				
CN-3	334100	6301990	Adjacent to the Kashouli residence (Residence 5) on Lot 188, DP755221.		
CN-4	333750	6302100	Adjacent to the Townsend residence (Residence 6) on Lot 120, DP755221.		
CN-5	333910	6301940	Adjacent to the Rozmanec residence (Residence 2) on Lot 1, DP559892.		
* See Figure 4.1					

4.3 Parameters Measured

The following noise parameters will be measured at and surrounding the quarry.

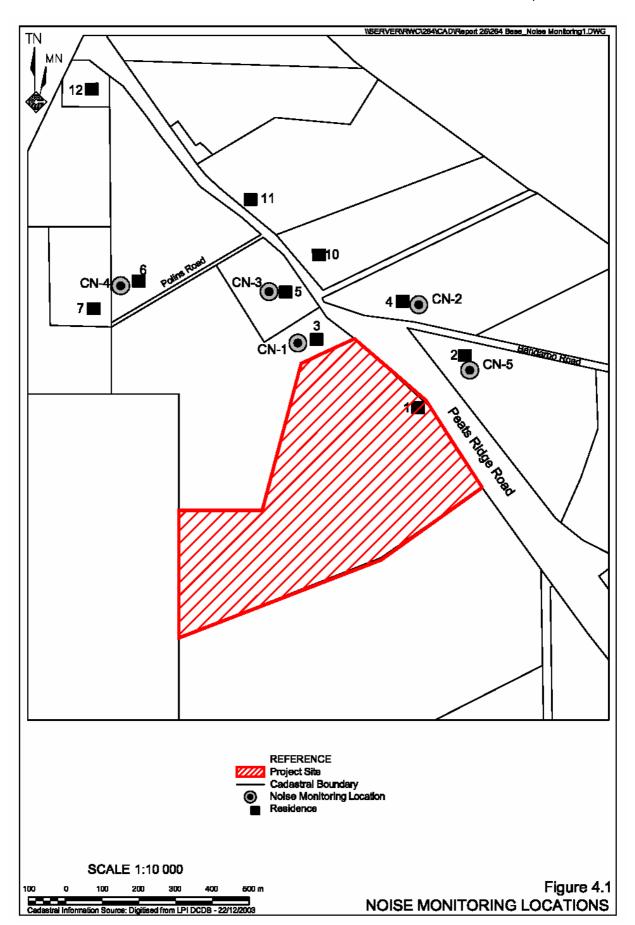
- The $L_{Aeq\ (15\ minute)}$ noise level is measured at an appropriate free-field location close to the façade of the relevant residence during day time and evening hours.
- The L_{A1 (1 minute)} noise level is measured at an appropriate free-field location close to the façade of the relevant residence during night time hours.

Monitoring will not be performed when then wind speed exceeds 3 m/s at 10m above ground level, or when it can be inferred that a temperature inversion exists with a strength >3°C per 100m

4.4 Monitoring Frequency

Noise Prediction Validation (CN-5):

Monitoring of noise will be undertaken within 2 weeks of commencement of construction activities and each extraction stage, ie. Stages 3/1 - 3/6. Should this monitoring validate the predictions made in the Amendment Report, no further monitoring will be undertaken at CN-5.



Noise Compliance Monitoring (CN-1 – CN-4):

Attended noise monitoring will be undertaken quarterly, during representative periods of activity within day time, evening and night time hours of operation. Unattended monitoring will be undertaken yearly and incorporate all DEC nominated operational periods, ie, day time, evening and night time.

Following Noise Complaint:

Noise monitoring will also be undertaken in the event of a genuine complaint about noise at a particular residence or property.

The nominated frequencies are considered appropriate for the Calga Sand Quarry, especially given the absence of noise-related complaints associated with the previous quarry operations. In the event that operations at the Calga Sand Quarry continue without major noise-related complaints, Rocla may apply to the Department and DEC for a scaling down of the monitoring program outlined in Sections 4.1 to 4.

4.5 Data Recording and Reporting

Data Recording

The following information will be recorded at each noise monitoring location.

- Date and time-period over which measurements are taken.
- Confirmation that the meter was calibrated before use.
- Name of person conducting measurements.
- Brief commentary on weather conditions during monitoring period (to be supplemented by data from the on-site weather station).
- Plan of the site showing the location/orientation of all plant and equipment operating during the measurement periods.

Data Reporting

The results of any noise monitoring commissioned by Rocla will be presented in the relevant AEMR. This will include an analysis of the monitoring results against the criteria listed in **Table 2.2** and **Table 2.3**, previous AEMR monitoring results and predictions made in the EIS and subsequent Amendment Report dated June 2005. Based on these results, trends in the noise levels will be identified and any non-compliances noted.

The recording of an exceedance of noise criteria identified in **Table 2.2** and **Table 2.3**, will trigger the implementation of contingency measures described in Section 2.7 of the NMPr.

5 REFERENCES

R.W. Corkery & Co. Pty. Limited (2004), Environmental Impact Statement for the Proposed Calga Sand Quarry Extension, prepared for Rocla Materials Pty Ltd.

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R.W. Corkery & Co. Pty. Limited (2005), Amendment to a Proposal Submitted as Development Application (DA 94-4-2004) for an Extension to the Calga Sand Quarry,, prepared for Rocla Pty Limited.