

Noise Management Plan

For the East Guyong Quarry



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1. Introduction

This *Noise Management Plan* (the Plan) has been prepared by Hanson Construction Materials (Hanson) and R W Corkery & Co Pty Limited (RWC) for the East Guyong Quarry (the Quarry). The Quarry is located approximately 22km southeast of Orange and 36km west of Bathurst (Figure 1).

This Plan has been prepared in satisfaction of *PA Condition 3(7)* of Project Approval (PA) 06_01931 and describes the following.

- A description of the activities approved under PA 06_0193.
- A description of consultation undertaken during preparation of this Plan.
- Identification of legal and other requirements associated with management of noise emissions from the Quarry.
- Identification of the objectives and key performance outcomes for this Plan and the Quarry.
- A description of Quarry personnel roles and responsibilities with respect to Noise Management.
- A description of inductions, training, awareness, and operating protocols to be implemented.
- Identification of surrounding residences and potential noise sources and impacts.
- A description of noise management measures that will be implemented during construction and operation of the Quarry.
- Surrounding residences and potential noise sources and impacts.
- A description of noise-related monitoring that will be undertaken.
- Evaluation of compliance with noise criteria.
- A description of corrective and preventative actions that will be implemented should exceedance(s) of the relevant criteria be identified.
- A description of the complaints handling and response procedures that will be implemented.
- A description of incident reporting procedures.
- A description of the publication of monitoring information.
- Detailing of plan evaluation review requirements.

In addition, a range of other management plans have also been prepared to guide operations within the Quarry. These include the following.

- Environmental Management Strategy
- Landscape Management Plan (incorporating Rehabilitation).
- Asbestos Management Plan.
- Blast Management Plan.
- Aboriginal Cultural Heritage Management Plan.

- Soil and Water Management Plan.
- Air Quality Monitoring Program.
- Pollution Incident Response Management Plan.
- Traffic Management and Driver Code of Conduct Plan.

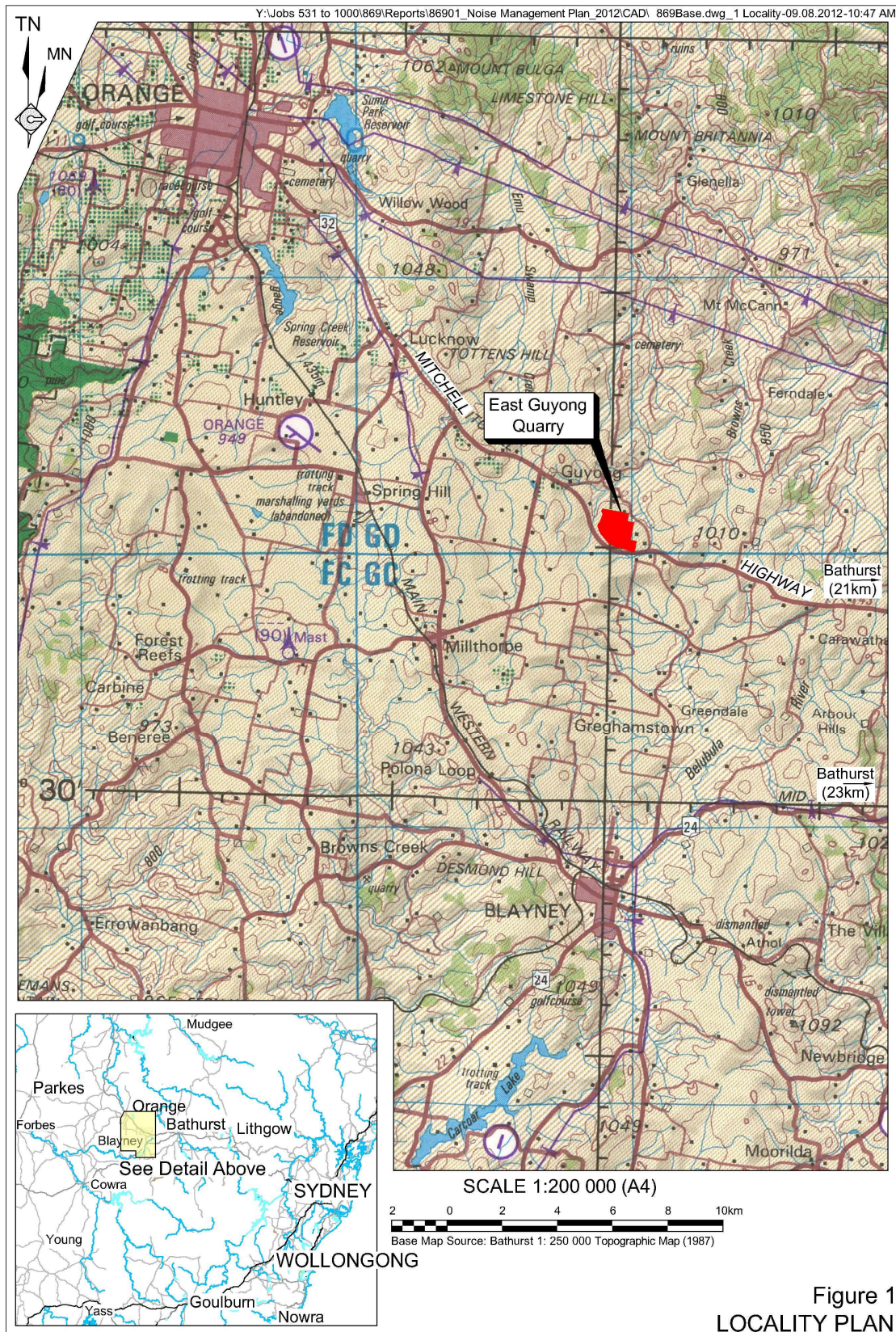


Figure 1: Locality Plan (A4 Colour)

2. Approved Activities

The approved activities at the Quarry comprise the following (**Figure 2**).

- Establishment of an extraction area to extract basalt using standard drill, blast, load and haul techniques.
- Construction and use of a processing plant to process the extracted basalt to produce a range of quarry products, including aggregates and road base, and stockpiling of the resulting products adjacent to the processing plant.
- Construction of a site access road and intersection with the Mitchell Highway.
- Transportation of up to 600 000t per year of quarry products via the Mitchell Highway using truck and dog and B Double trucks.
- No more than 30 laden trucks despatched from the Quarry in any hour, no more than 160 laden trucks despatched from the Quarry on any day (Monday to Friday) and no more than 60 laden trucks may be despatched from the Quarry on a Saturday.
- Construction of a range of bunds and mounds and establishment of native vegetation to provide visual screening for the quarry operations.

The approved quarry life is until 31 December 2042 and the approved hours of operation are as follows.

- Monday to Friday (non-daylight savings) – 6:00am to 6:00pm.
- Monday to Friday (daylight savings) – 6:00am to 8:00pm.
- Saturdays – 7:00am to 1:00pm.
- Sundays and public holidays – nil.

Product despatch between 5:00am and 10:00pm, Monday to Saturday is permitted following negotiation of agreements with the seven surrounding landholders nominated in *Condition 6 of Schedule 3 of PA 06_0193* and the notification of the Department in writing of the terms of these agreements.

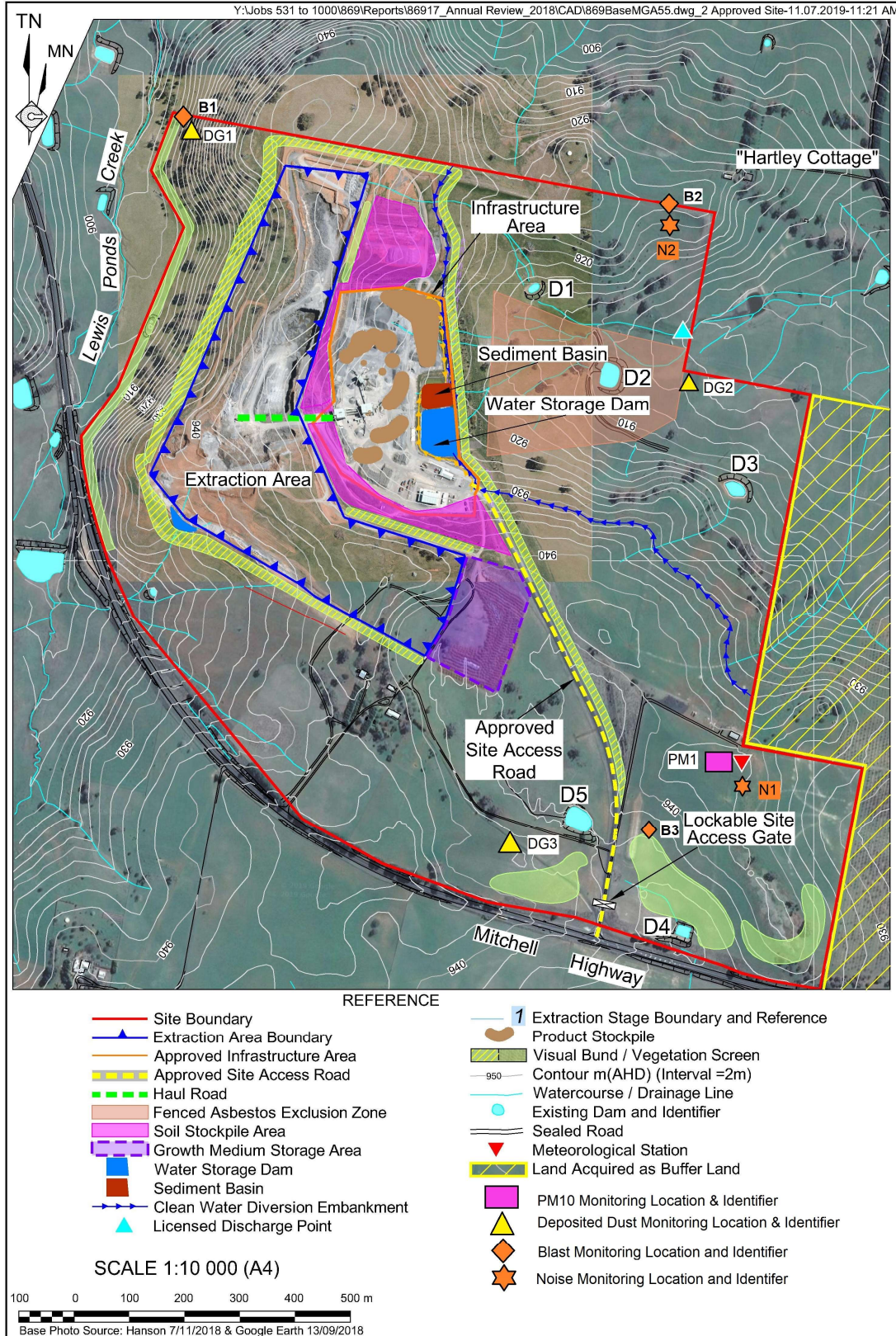


Figure 2: Site Layout (A4 Colour) Dated 11/07/19 inserted 11/07/2019

3. Consultation

3.1. Government Agency Consultation

The following government agency consultation was undertaken during the preparation of this Plan.

- Initial consultation by telephone to the Environment Protection Authority on 24 July 2012 to determine any requirements for inclusion in this Plan.
- Email to the Environment Protection Authority (EPA) on 24 July 2012 to confirm any requirements for this Plan by 8 August 2012.
- A draft version of this Plan was provided to EPA on 9 August 2012, with a request to review the Plan and provide feedback. A response was received on 4 September 2012 indicating that the EPA did not intend to provide comments on the draft Plan.
- Following approval of MOD 2, an updated version of this Plan was provided to the EPA on 12 July 2019 with a request to review the Program and provide feedback by 16 July 2019. A response was received 7 August 2019 indicating that EPA did not intend to provide comments on the updated draft plan.

3.2. Landholder Consultation

In accordance with *PA Condition 4(1)*, within 3 months of the Project Approval, Hanson notified, in writing, the landowners of all residences located within 1km of any of the site boundaries of their right to request monitoring in accordance with *PA Condition 4(3)*.

Figure 3 presents the residences to which *PA Condition 4(1)* applies and **Table 1** presents the consultation undertaken to date and the responses received.

It is noted, however, that following receipt of the requests for noise monitoring at the “Quinton” and “Wheatfield’s” properties, the owners of those properties sold them. Hanson contacted the purchaser, Mr Errol Babbage on 3 August 2012. During that conversation, it was agreed that monitoring should be done on the Hanson-owned land, as close as practicable to the residences on “Quinton” and “Wheatfields” (see Section 11.2 for further details of the monitoring program).

3.3. Community Consultation

Community consultation was also undertaken through informal and formal consultation processes during the assessment period prior to the approval of the Quarry. Further community consultation was undertaken during the MOD application via CCC discussion. Community members generally accepted the modification application. Feedback received by the community has been taken into account when preparing this Plan.

Figure 3: Surrounding Residences A4/Colour Figure dated 06/09/19 inserted 26/09/19

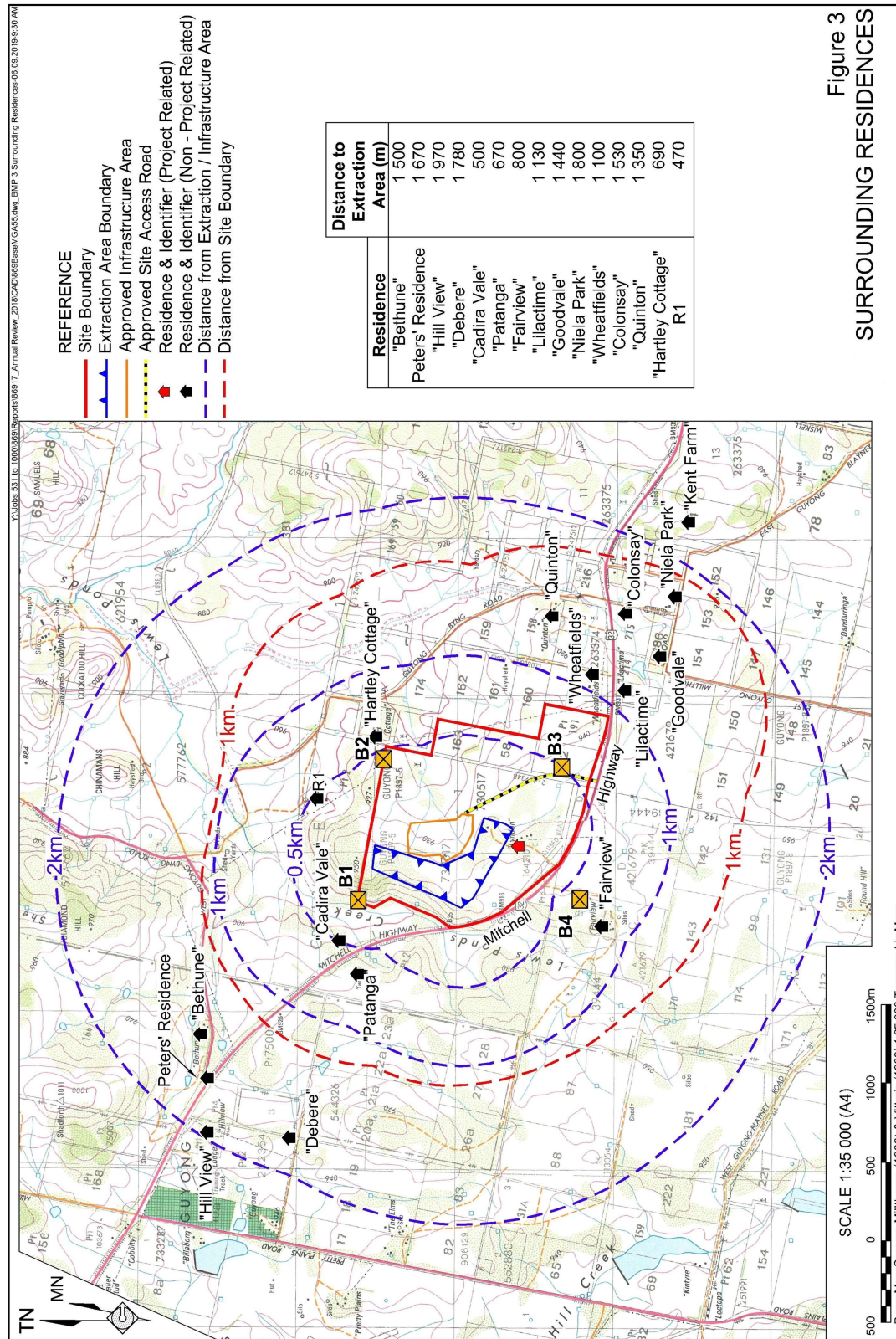


Table 1: Landholder Consultation

Landholder	Property Name ¹	Type of Communication	Date Sent	Response Received
Gordon Family (1)	"Bethune"	Letter	5 April 2011	Nil
Gordon Family (2)		Letter	5 April 2011	Nil
RJ, MG and GJ Munro	"Cadira Vale"	Letter	5 April 2011	Nil
S and T Gordon	R1	Letter	5 April 2011	Nil
Mr & Mrs McPhee	"Colonsay"	Letter	5 April 2011	Nil
D Harris	"Fairview"	Letter	5 April 2011	Nil
S and T Gordon	"Hartley Cottage"	Letter	5 April 2011	Nil
Mrs J E Pritchard	"Kent Farm"	Letter	5 April 2011	Nil
RE and CM Hindmarsh	"Kintyre"	Letter	5 April 2011	Nil
Mr and Mrs Bestwick	"Lilac Time"	Letter	5 April 2011	Nil
Stephanie Bestwick and Simon Warner		Letter	5 April 2011	Nil
RE and CM Hindmarsh	"Patanga"	Letter	5 April 2011	Nil
Mr Peters	Cnr Byng Road and Mitchell Highway	Letter	5 April 2011	Nil
H McNair and D Mansfield	"Quinton"	Letter	5 April 2011	Received letter 8 April 2011 requesting noise monitoring
H McNair and D Mansfield	"Wheatfields"	Letter	5 April 2011	Received letter 8 April 2011 requesting noise monitoring
Note 1: See Figure 3 .				
Source: Hanson Construction Materials Pty Ltd.				

4. Legal and other Requirements

Hanson was granted PA 06_0193 by the NSW Land and Environment Court on 21 May 2012 pursuant to Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). DA 06_0193 was amended on 17 April 2019 following the approval of MOD 2. The approval includes the required criteria that Hanson must comply with and sets out the core requirements of this Plan. Relevant noise quality-related conditions associated with this approval are reproduced in **Table 2**. **Table 3** presents the relevant noise quality-related commitments from the Statement of Commitments incorporated within PA 06_0193 and where each is addressed in this document. **Table 4** presents the relevant noise-related requirements from the Environment Protection Licence 20190.

Table 2: Noise-related Project Approval Requirements

Page 1 of 4

Schedule	Condition	Section Where Addressed																								
NOISE																										
3(5)	Impact Assessment Criteria The Proponent must ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 2. Table 2: Noise impact assessment criteria dB(A) $L_{Aeq}(15min)$ <table><tr><th>Location</th><th>Day</th><th>Evening</th><th>Night</th></tr><tr><td>"Hartley Cottage"</td><td>35</td><td>35</td><td>35</td></tr><tr><td>"Cadira Vale"</td><td>35</td><td>35</td><td>35</td></tr><tr><td>"Lilac Time"</td><td>35</td><td>35</td><td>35</td></tr><tr><td>"Fairview"</td><td>36</td><td>35</td><td>35</td></tr><tr><td>All other privately owned land</td><td>35</td><td>35</td><td>35</td></tr></table> Notes: - To interpret the locations referred to Table 1, see Figure 3 in Appendix 1. - Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy. - The noise limits do not apply if the Proponent has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.	Location	Day	Evening	Night	"Hartley Cottage"	35	35	35	"Cadira Vale"	35	35	35	"Lilac Time"	35	35	35	"Fairview"	36	35	35	All other privately owned land	35	35	35	11.2.1
Location	Day	Evening	Night																							
"Hartley Cottage"	35	35	35																							
"Cadira Vale"	35	35	35																							
"Lilac Time"	35	35	35																							
"Fairview"	36	35	35																							
All other privately owned land	35	35	35																							
3(6)	Operating Hours The Proponent must comply with the operating hours in Table 3. Table 3: Operating Hours <table><tr><th>Activity</th><th>Day</th><th>Time</th></tr><tr><td rowspan="4">All quarrying operations. Transportation off-site</td><td>Monday – Friday during AEST (except Public Holidays)</td><td>6:00am to 6:00pm</td></tr><tr><td>Monday – Friday during AEDT (except Public Holidays)</td><td>6:00am to 8:00pm</td></tr><tr><td>Saturdays</td><td>7:00am to 1:00pm</td></tr><tr><td>Sundays and Public Holidays</td><td>No Activities</td></tr></table> However, the Proponent may undertake: (a) transportation activities on and off-site outside of these hours (but only between hours up to and including 5.00 am and 10.00 pm, Monday to Saturday), if the Proponent has negotiated agreements to this effect with the owners of the following residences (whilst privately-owned) "Fairview", "Lilac Time", "Cadira Vale", "R1", "Hartley Cottage", "Quinton" and "Wheatfields", as shown in Figure 3 of Appendix 1, and the Proponent has advised the Department in writing of the terms of these agreements; and (b) maintenance activities at any time provided that the activities are not audible at any privately owned residence. Note: This condition does not apply to delivery of material if that delivery is required by police or other authorities for safety reasons, and/or the operation or personnel or equipment are endangered. In such circumstances, notification is to be provided to EPA and the affected residents as soon as possible, or within a reasonable period in the case of emergency.	Activity	Day	Time	All quarrying operations. Transportation off-site	Monday – Friday during AEST (except Public Holidays)	6:00am to 6:00pm	Monday – Friday during AEDT (except Public Holidays)	6:00am to 8:00pm	Saturdays	7:00am to 1:00pm	Sundays and Public Holidays	No Activities	10.1												
Activity	Day	Time																								
All quarrying operations. Transportation off-site	Monday – Friday during AEST (except Public Holidays)	6:00am to 6:00pm																								
	Monday – Friday during AEDT (except Public Holidays)	6:00am to 8:00pm																								
	Saturdays	7:00am to 1:00pm																								
	Sundays and Public Holidays	No Activities																								

Schedule	Condition	Section Where Addressed
3(7)	Noise Management The Proponent must prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:	
	(a) be prepared in consultation with EPA, and be submitted to the Secretary for approval prior to the commencement of construction activities;	3.1
	(b) include: - a description of the measures that would be implemented to minimise noise emissions from the project, with particular focus on: - quarrying operations within 500 metres of residences on privately-owned land; - transportation activities; and - continual improvement of noise performance; - a noise monitoring protocol for evaluating compliance with the relevant noise limits in this approval; - a protocol for the investigation, notification and mitigation of identified exceedances of the relevant noise limits; and - a continual improvement program for investigating, implementing and reporting on reasonable and feasible measures to reduce noise generated by the project.	10
		10.3
		10.5
		15
		11
		12
		12
	The Proponent must implement the Noise Management Plan as approved by the Secretary	
4(1)	Notification of Landholders Within 3 months of this approval, the Proponent must notify, in writing, the landowners of all residences located within one kilometre of any of the project site boundaries of their right to request monitoring in accordance with <i>PA Condition (4)3</i> .	3.2
4(2)	If the results of the monitoring required in Schedule 3 identify that the impacts generated by the project on site are greater than the relevant impact assessment criteria, and there is no negotiated agreement in place to allow the impact, then within 2 weeks of obtaining the monitoring results the Proponent must: notify the Secretary, the affected landowners and tenants (including tenants of quarry owned properties) accordingly, and provide monitoring results to each of these parties until the results show that the project is complying with the relevant criteria in Schedule 3; and	12

Table 2 (Cont'd): Noise-related Project Approval Requirements

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Schedule	Condition	Section Where Addressed
NOISE (Cont'd)		
5(2)	Management Plan Requirements The Proponent must ensure that the Management Plans required under this approval are prepared in accordance with any relevant guidelines, and include:	
	(a) a summary of relevant background or baseline data;	9
	(b) a description of:	
	▪ the relevant statutory requirements (including any relevant approval, licence or lease conditions);	4
	▪ any relevant limits or performance measures/criteria; and	10.1 & 11.2.1
	▪ the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;	11.2.1
	(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	10
	(d) a program to monitor and report on the:	
	▪ impacts and environmental performance of the project; and	11
	▪ effectiveness of any management measures (see (c) above);	11
	(e) a contingency plan to manage any unpredicted impacts and their consequences;	12
	(f) a program to investigate and implement ways to improve the environmental performance of the project over time;	12
	(g) a protocol for managing and reporting any:	
	▪ incidents;	14
	▪ complaints;	13
	▪ non-compliances with statutory requirements; and	12
	▪ exceedances of the impact assessment criteria and/or	12
	▪ performance criteria; and	12
	(h) a protocol for periodic review of the plan.	16
	Note: At the discretion of the Secretary, some of these requirements may be waived where they are either not relevant or necessary.	

Table 2 (Cont'd): Noise-related Project Approval Requirements

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Schedule	Condition	Section Where Addressed
NOISE (Cont'd)		
5(4)	Revision of Strategies, Plans and Programs Within 3 months of the submission of an: (a) the submission of an annual review under <i>PA Condition 5(3)</i>; (b) the submission of an incident report under <i>PA Condition 5(6)</i>; (c) the submission of an independent environmental audit report under <i>PA Condition 5(8)</i>; and (d) the approval of any modification of the conditions of this approval, the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Secretary. Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.	16
5(6)	Incident Notification The Proponent must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing to compliance@planning.nsw.gov.au and identify the project (including the project application number and name) and set out the location and nature of the incident.	14
5(7)	Non-Compliance Notification Within seven days of becoming aware of a non-compliance, the Proponent must notify the Department of the non-compliance. The notification must be in writing to compliance@planning.nsw.gov.au and identify the project (including the project application number and name), set out the condition of this approval that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. Note: a non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	14

Table 3 presents the relevant noise-related commitments from the Statement of Commitments incorporated within PA 06_0193 and where each is addressed in this document.

Table 3: Noise-related Commitments

Commitment	Section Where Addressed
NOISE	
Noise	An Operational Noise Management Plan will be developed for the proposal and be implemented prior to extraction commencing. The plan will incorporate a noise monitoring program to monitor noise emissions and determine compliance with the project specific noise goals. The Plan will include: ▪ Noise monitoring on site and within the community ▪ Prompt response procedures to any community issues of concern ▪ Refinement of on-site noise mitigation measures and quarry operating procedures where practical
	11
	13
	12

Commitment		Section Where Addressed
	Mechanism for discussion and negotiation with relevant property holders to assess concerns	12 & 13
	Traffic Noise Management Plan will be developed and implemented for truck movements on and accessing/exiting the site.	10.3.2 & 11.5
Environmental Management, Monitoring and Auditing	- Within 7 days of detecting an exceedance of the limits/performance criteria in this approval or an incident causing (or threatening to cause) material harm to the environment, the proponent shall report the exceedance/incident to EPA and any relevant agency. The report will: - describe the date, time and nature of the exceedance/incident; - identify the cause (or likely cause) of the exceedance/incident; - describe what action has been taken to date; and - describe the proposed measures to address the exceedance/incident.	
		13
		13
		13
		13
	Prior to the commencement of any operations, proponent will implement, publicise and list with a telephone company a contact phone number which will enable the general public to reach a person who can arrange appropriate response action to the enquiry. The proponent will maintain a register to record details of all enquiries received and actions undertaken in response. This record will be made available to the EPA as required.	13

Table 4 presents the relevant noise-related requirements from the Environment Protection Licence.

Table 4: Noise-related Environment Protection Licence Requirements

Condition Number	Condition				Section Where Addressed
L4.1	Noise limits (operation): noise from operational activities at the premises must not exceed:				11.2.1
	Location	Day (7am to 6pm)	Evening (6pm to 10pm)	Night (10 pm to 7am)	
	"Hartley Cottage"	35 dB(A)	35 dB(A)	35 dB(A)	
	"Cadora Vale"	35 dB(A)	35 dB(A)	35 dB(A)	
	"Lilactime"	35 dB(A)	35 dB(A)	35 dB(A)	
	"Fairview"	36 dB(A)	35 dB(A)	35 dB(A)	
	"Patanga"	35 dB(A)	35 dB(A)	35 dB(A)	
	All other sensitive receivers	35 dB(A)	35 dB(A)	35 dB(A)	

Condition Number	Condition	Section Where Addressed
L4.2	Hours of operation (operating hours): quarrying activities at the premises are restricted to the following operating hours: a) Monday to Friday (during AEST): 6 am to 6 pm; b) Monday to Friday (during AEDT): 6 am to 8 pm; c) Saturday: 7 am to 1 pm; and d) at no time on Sundays or Public Holidays.	10.1
L4.3	Hours of operation (maintenance): maintenance activities may be carried out at any time so long as such activities are not audible at any privately owned residence.	10.1
L4.4	Hours of operation (transport): transport activities may be carried out between 5 am and 10 pm, Monday to Saturday, where the licensee has negotiated agreements to this effect with the owners of "Cadira Vale", "Fairview", "Hartley Cottage", "Lilactime", "Quinton", "R1", and "Wheatfields".	10.1
L4.5	Conditions L4.1 to L4.2 do not apply to the delivery of material outside of the relevant hours of operation if that delivery is required by the NSW Police Force or other authorities for safety reasons and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification is to be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.	10.1
L4.6	Noise from the premises is to be measured at the most affected point on or within the residential property boundary or, if that is more than 30 metres from the residence, at the most affected point within 30 metres of the residence to determine compliance with condition L4.2.	11.2.2
L4.7	For the purposes of determining the noise level generated from the premises, the modification factors in Section 4 of the NSW Industrial Noise Policy (EPA, 2000/2001) must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.	11.2.2
L4.8	The noise emission limits identified at condition L4.2 applies under meteorological conditions of: a) wind speeds up to 3m/s at 10 metres above ground level; and/or b) temperature inversion conditions of up to 3 °C/100 metres.	11.2.3
M4.1	The licensee is required to undertake attended noise monitoring once every quarter during the reporting period in accordance with the NSW Industrial Noise Policy (EPA, 2000/2001) and any relevant Australian Standards to determine compliance with condition L4.2.	11.2.3
M4.2	The licensee is required to provide the EPA with a Noise Impact Assessment document no later than one month after the attended noise monitoring required by condition M4.1 was carried out that outlines the findings of this noise monitoring.	11.2.4
M4.5	The licensee, following the receipt of a noise related complaint and if required by the EPA, must undertake noise monitoring as required by the EPA to determine compliance with the noise limits stipulated by condition L4.2.	11.2.5

5. Objectives and Outcomes

Table 5 presents the objectives and key performance outcomes for this Plan and the Quarry.

Table 5: Objectives and Key Performance Outcomes

OBJECTIVES	KEY PERFORMANCE OUTCOMES
Noise	
(a) To ensure compliance with all relevant Project approval and Environment Protection Licence criteria and reasonable community expectations.	(i) Compliance with all relevant criteria and reasonable community expectations, as determined in consultation with the relevant government agencies.
(b) To ensure the appropriate noise management and mitigation measures are implemented and maintained during all stages of the Project.	(ii) All identified noise management and mitigation measures are implemented and maintained to the extent required with all relevant criteria.
(c) To ensure an appropriate monitoring program is implemented to establish compliance or otherwise with relevant criteria during all stages of the Project.	(iii) All identified monitoring is undertaken in accordance with the relevant procedures and at the relevant intervals to the standards required within the Department approved management plan.
(d) To ensure an appropriate complaints handling and response protocol is in place and regularly reviewed.	(iv) Complaints (if any) are handled and responded to in an appropriate and timely manner with protocol regularly reviewed for potential improvements.
(e) To ensure continual improvement for investigating, implementing and reporting on reasonable and feasible measures to reduce noise impacts in an efficient and environmentally responsible manner.	(v) An appropriate continual improvement program has been implemented to minimise the potential for adverse impacts to the environment and surrounding neighbours, regularly reviewed and upgraded when required.
(f) To ensure an appropriate incident reporting program is in place and regularly reviewed, if required.	(vi) Incidents (if any) are reported in an appropriate and timely manner.

6. Roles and Responsibilities

Table 6 presents the roles and responsibilities for the implementation of this *Noise Management Plan*.

Table 6: Roles and Responsibilities

ROLES	RESPONSIBILITIES
Operations Manager	Must ensure adequate resources are available to enable implementation of the Plan.
Quarry Manager	Accountable for the overall environmental performance of the East Guyong Quarry operations, including the following outcomes of this Plan. - Implementation of all noise controls outlined in Section 10.2 and 10.3.1 are implemented. - Implementation of all traffic mitigation measures outlined in Section 10.3.2.
Quarry Supervisor	Manage the implementation of the following components of this Plan. - Noise monitoring as outlined in Sections 11.3.1., 11.3.2, 11.3.3 and 11.5. - Evaluation of compliance as outlined in Section 12 and related follow-up actions. - Complaints handling and response as outlined in Section 13. - Incident reporting as outlined in Section 14. - Continual improvement of noise management as outlined in Section 15. - Publication of monitoring data and reports as outlined in Section 16. - Review of this Plan as outlined in Section 17.
All personnel	Ensure training and awareness induction has been undertaken. Compliance with this Plan.

Source: Hanson Construction Materials Pty Ltd.

7. Competence Training and Awareness

All Hanson personnel and contractors and their employees will undergo Hanson and site specific inductions, incorporating basic noise management awareness training as part of the site induction program. The following areas will be covered in the induction.

- Use of only approved reversing alarms.
- Use of noise screens or silenced enclosures around lighting plants, generators and other stationary, surface noise sources.
- Awareness of prevailing wind directions and their potential to increase noise emissions downwind.
- Awareness of the noise enhancing effects of temperature inversions and the times of day and meteorological conditions under which they may occur.
- Awareness of operating hours.
- Awareness of community complaints protocols.

- Monitoring of noise emissions at the nearest privately owned residences.
- Awareness of the requirements for notifying incidents.

The Quarry Manager will be responsible for ensuring the appropriate noise management training is included in the induction.

8. Surrounding Residences

Figure 3 displays the locations of residences within 2km of the Extraction and Infrastructure Area.

9. Existing Environment

9.1. Introduction

An *Environmental Assessment* dated September 2009 and associated documentation was prepared to support the application for PA 06_0193. This section describes the background noise levels and noise levels that were predicted during the environmental assessment of the proposed activities. Additionally, A *Noise Impact Assessment* dated September 2018 by Umwelt Pty Limited was prepared to support *East Guyong Quarry Modification 2 Environmental Assessment* to modify PA 06_0193. Information has been updated to reflect baseline and predicted air quality levels that were assessed for the Quarry.

This information was used in the design of mitigation measures and monitoring procedures described in Sections 10 and 11 to ensure best practices are adopted for noise management for the Quarry. In addition, this information will be referred to ensure practices are developed for the continual improvement of noise management as described in Section 15.

9.2. Background Noise Sources and Levels

The site is located within a rural environment with typically low background noise levels. The main noise sources contributing to the background noise levels are local road traffic, agricultural activities, stock and wind.

Table 7 lists the background noise levels measured continuously from 13 December 2002 to 23 December 2002 at a number of representative locations. It is recognised that the noise levels recorded are likely to be lower than corresponding levels in 2012 due to increases in traffic levels on the Mitchell Highway. Hence, the levels provided in **Table 7** are recognised to be conservative. Additionally the ambient noise levels in **Table 7** were used in the *Noise Impact Assessment* (Umwelt, 2018) as the established ambient noise levels from the 2007 NIA (Heggies Pty Ltd, 2008) were considered appropriate for the assessment.

Table 7: Ambient Noise Levels – Unattended (dB(A) re 20μPa)

Location	Ambient (LA90(15minute)) Level All Noise Sources ¹			LAeq (period) Existing Ambient Noise Level ¹		
	Day	Evening	Night	Day	Evening	Night
North-west boundary (adjoining the “Carina Vale” boundary)	37	31	30	63	61	60
Southern Boundary ²	32	31	30	54	46	46
“Lilac Time”	40	32	30	54	55	55
Eastern Boundary (adjacent to “Hartley Cottage”)	30	30	30	52	59	55
Note 1: The LA90 represents the level exceeded for 90% of the interval period and is referred to as the average minimum or background noise level. The LAeq is the equivalent continuous noise level defined as the level of noise equivalent to the energy average of noise levels occurring over a measurement period. Note 2: The offset distance from the road to this monitoring location is similar to that for the “Fairview” receiver.						
Source: Heggies (2007) - Modified after Table 7.						

In addition, operator-attended noise measurements were conducted on 13 and 23 December 2002 (see **Table 8**).

Table 8: Ambient Noise Levels Attended LA (LA15-minute)

Location	Date/ Time	Primary Noise Descriptor (dB(A) re 20μPa)						Description of Noise Emission Sources
		LAmax	LA1	LA10	LA90	LAmin	LAeq	
North-west boundary (adjoining the “Carina Vale” boundary)	13/12/02 12:30	77	73	68	46	37	64	Traffic from Mitchell Highway: 46-77 dB(A) Rural Background 37-45 dB(A)
Southern Boundary	23/12/02 13:30							Fence impact – 77 dB(A) Wind – 45-48 Mitchell Highway Traffic 32-36 dB(A)
“Lilac Time”	13/12/02 13:30	70	63	56	44	38	53	Traffic from Mitchell Highway: 46-70 dB(A) Rural Background 38-43 dB(A)
Eastern Boundary (adjacent to “Hartley Cottage”)	23/12/02 14:26	53	51	49	43	41	46	Rural Machinery Dominant 40 to 53 dB(A)
Eastern Boundary (noise logger)	18/12/02 14:50	62	53	41	31	28	41	
Source: Heggies (2007) - Modified after Table 6								

It is proposed that background levels (without the quarry operating) will also be recorded during the proposed monitoring programs discussed in Section 11.

9.3. Potential Impacts

The potential noise-related impacts will arise from the use of the mobile earthmoving equipment, fixed plant and road-registered trucks on site.

The sound power levels of the acoustically significant plant and equipment used in predictive noise modelling presented in the *Noise Impact Assessment* (Umwelt 2018), to support *East Guyong Quarry Modification 2 Environmental Assessment* to modify PA 06_0193, are provided in **Table 9**.

Table 9: Typical Noise Levels from Mobile Equipment and Fixed Plant (Umwelt, 2018)

Noise Source	Sound Power Level dB(A) re 10 ⁻¹² W
Komatsu PC450 Excavator	112
Komatsu HD325 dump truck	113
CAT 980H loader loading hopper	108
Komatsu WA 430 loader	110
35t CAT digger	108
Crushing and processing plant	112
Furukawa Rock Drill	112
Hitachi/Bell ADT165 Articulated haul truck	109
Watercart	100
Road Truck	102
Source: Umwelt, 2015; Komatsu HD325-6 Manufacturer's Specification; BS5228.1-2009 Table C10 ref 5, 4, 1; Heggies Pty Ltd; Volvo Environmental Declaration; Umwelt 2011.	

9.4. Predicted Impacts

Table 10 lists the predicted operating noise levels at seven representative receivers around the Quarry.

10. Management Measures

PA Condition 3(7)(b) requires that this Plan describes the noise mitigation measures that will be adopted to ensure compliance with *PA Conditions 3(5) and 3(6)* (**Table 2**). This section has been prepared in satisfaction of that requirement.

Table 10: Predicted Operating Noise Levels (Umwelt, 2018)

Receiver	Time Period			
	Day	Evening	Night	Night (Temperature Inversion)
R1	26	26	26	29
Hartley Cottage	30	31	31	35
Quinton	23	23	24	29
Wheatfields ¹	18	18	19	23
Lilac Time	16	17	17	21
Colonsay	16	16	17	21
Fairview	23	23	24	27
Patanga	34	30	31	32
Cadira Vale	35	31	31	32

¹ Wheatfields is a quarry owned residence and is therefore not a sensitive receiver requiring consideration under the INP.

10.1. Operating Hours and Conditions

Hanson will ensure that the operating hours and conditions identified in *PA Conditions 3(6)* (**Table 2**) are strictly complied with.

The Quarry Manager will be responsible for ensuring the operating hours are included in the site induction and that no departures will be tolerated.

10.2. Engineering Noise Controls

Heggies (2007) identified that targeted noise attenuation measures will need to be applied to several major noise sources in order for the noise criteria to be achieved at surrounding residences. Hanson has accepted these recommendations and the following engineering noise controls have or, in the future, will be implemented.

- The sound power levels of the mobile equipment to be used at the Quarry will be as follows.
 - Front-end loader (20t) SWL L_{Aeq} 109 dB(A).
 - Blasthole drill SWL L_{Aeq} 112 dB(A).
- The location(s) of rock hammering operations will be selected to achieve maximum attenuation of noise emissions.
- If required, during Stage 7 (**Figure 3**) the following equipment will be replaced or modified in order to meet the respective sound power levels:
 - Front-end loader (30t) SWL L_{Aeq} 106 dB(A).
 - Dump Truck SWL L_{Aeq} 101 dB(A).
 - Articulated Haul Truck L_{Aeq} 102 dB(A).

- Implementation of alternative reversing alarm options, including frequency modulated alarms, proximity alarms and visual alarms. Such alternative alarms will only be used if Hanson is satisfied that the safety-related risks of the alternative alarm are acceptable. Hanson will use the least intrusive reversing alarms that do not compromise safety.

Hanson will ensure that all earthmoving equipment brought onto site have sound power levels less than or equal to those listed in **Table 9**.

Additionally Umwelt (2018) identified the following noise management and monitoring measures that will also be implemented for the extraction of material within the modification area to enable the predicted noise levels to be achieved:

- Extraction will progress vertically and laterally so that a high pit wall is maintained at all times throughout the extraction of the modification area, thereby providing the maximum amount of acoustic shielding for the modified quarry operations for receivers to the west.
- Quarry operations will be managed so as to meet noise impact assessment criteria at all receivers, with particular focus given to periods where equipment is operating at higher elevations in the pit with reduced acoustic shielding from the pit wall. This will include, in order of preference:
 - actively managing the number and location of equipment within the pit,
 - limiting operations during adverse weather conditions and/or
 - modifying or replacing mobile equipment to further limit their sound power level.
- The activity of noise sources on the surface will be restricted during the evening and night. In addition to restricting the operation of the drill to day time period only, an additional restriction that only one of the quarry's major noise sources will be allowed to operate on the surface at any time during the day time period.
- In the event that mobile equipment at the quarry is replaced in the future, new equipment would need to meet the sound power levels specified by the assessment, or the quarry would need to be reassessed to ensure the noise impacts continue to comply with approved limits.
- An additional noise monitoring location will be established to the west of the proposed additional extraction area to monitor compliance with noise assessment criteria at receivers to the west.

10.3. Procedural Noise Controls

10.3.1. Quarrying Operations

The following best practice operational noise management measures will be adopted.

- Mobile plant will be fitted with high efficiency mufflers, where available. These will be maintained to manufacturer's specifications.
- Regular and effective maintenance of all equipment including vehicles travelling on and off the Quarry Site will be conducted. Prompt attention will be given to repair of loose or rattling parts and broken equipment. All maintenance work will be carried out by qualified persons.
- All Hanson personnel, and contractors and their employees, will be made aware of their obligations and responsibilities with regard to minimising noise emissions. Contractors will familiarise themselves with methods of controlling noisy equipment and alternative construction procedures as identified in AS2436-1981 *"Guide to Noise Control on Construction, Maintenance and Demolition Sites"*.

- If required, consideration will be given, in consultation with landholders, to acoustical mitigation at receivers.
- Restriction of drilling operations to daytime only (7:00am to 6:00pm) and then with recognition of avoiding periods of temperature inversions.
- Extraction will progress vertically and laterally so that a high pit wall is maintained at all times throughout the extraction of the modification area, thereby providing the maximum amount of acoustic shielding for the modified quarry operations for receivers to the west.

In addition, any quarrying operations within 500m of residences on privately-owned land will be reviewed prior to undertaking scheduled activities to ensure noise criteria identified in *PA Condition 3(5)* can be achieved (**Figure 3**). This review will include the assessment of:

- sound power levels for equipment to be used;
- topography and bunding relative to the residence;
- prevailing and predicted weather conditions; and
- noise criteria to be achieved.

If the review identifies that there is the potential for noise criteria levels to be above those listed in *PA Condition 3(5)* the Quarry Manager will implement preliminary attended noise monitoring at the potentially affected residence/s to determine if noise levels can be achieved.

If it is determined that noise levels are above the relevant criteria further mitigation measures will be implemented. If following implementation of those measures it becomes apparent that the approved noise criteria cannot be achieved, consultation with the relevant owner/s of the residences/land will be undertaken to determine if a written agreement can be obtained for the activity to occur.

If a written agreement is obtained by the relevant owner, a copy will be provided to the Department of Planning, Industry and Environment prior to activities occurring. Alternatively, if an agreement is not possible, investigations re further mitigation measures would be undertaken. This would include relocating the noise source or ceasing the relevant activity.

The Quarry Manager will be responsible for ensuring all activities are within the required noise criteria identified in *PA Condition 3(5)*.

10.3.2. Traffic

The following best practice traffic noise management measures have been implemented.

- Construction of an alternative site access road within a topographic depression to mitigate quarry traffic noise at “Hartley Cottage” (**Figure 2**).
- Monitoring of heavy vehicle departure times and weights via Hanson’s weighbridge management system.
- Implementation of a Drivers’ Code of Conduct. (see *Traffic Management Plan*)
- Enforcement of a 60km/h speed limit on the site access road and a 20km/h speed limit in the vicinity of the weighbridge, processing plant and stockpile area. The respective limits will be sign posted at the entrance to the site and near the weighbridge.

Transportation operations between 5:00am and 10:00pm, Monday to Saturday will only be permitted following negotiation of written agreements with the seven surrounding landholders nominated in *PA Condition 3(6a)*.

The Quarry Manager will be responsible for the implementation of procedural noise controls.

11. Noise Monitoring Protocol

11.1. Introduction

PA Condition 3(7)(b) requires that this Plan include:

- a noise monitoring protocol for evaluating compliance with the relevant noise limit criteria identified in *PA Condition 3(5)*; and
- a protocol for determining exceedances of the relevant conditions of the approval.

This sub-section has been prepared in satisfaction of that requirement.

It is noted that the criteria nominated in *PA Condition 3(5)* relate to all Quarry-related activities undertaken within Hanson's property including extraction, processing, product loading and truck movements until they depart from the Quarry onto the Mitchell Highway.

11.2. Attended monitoring

11.2.1. Purpose and Criteria

The purpose of the attended noise monitoring will be to determine compliance with the criteria identified in *PA Condition 3(5)* (**Table 2**). It is noted that the criterion are nominated to be $L_{Aeq\ 15\ minutes}$ 35dB(A) at any residence at any time of day or night, with the exception of "Fairview" where the daytime criterion are 36dB(A).

11.2.2. Noise Monitoring Locations

It is proposed to monitor operational noise levels at two locations near the eastern (Location N1) and northeastern (Location N2) boundary of Hanson's property (see **Figure 2**). These locations are in effect intermediate locations between operational areas and surrounding residences to the southeast and northwest of the Quarry. Location N2 is approximately 150m southwest of the "Hartley Cottage" residence and Location N1 is approximately 500m west-northwest "Wheatfields", the closest residence to the southeast of the Quarry.

The use of the two intermediate monitoring locations is proposed in lieu of the current owners of the surrounding residences nominating their agreement for Hanson to undertake monitoring at their property and to ensure that these residents are not unduly inconvenienced as a result of the attended monitoring program. Hanson notes that in the event that the owners of the properties identified in **Table 1** change their minds and subsequently request inclusion of their property in the noise monitoring program, that the relevant residences would be included in the program and that this plan would be amended to reflect that request.

Attended noise monitoring will also be undertaken at surrounding residences in the event of a substantiated noise-related complaint (see Section 11.3) or in the event that a landholder exercises their rights under *PA Condition 4(3)* to request an independent review of noise-related impacts.

11.2.3. Methodology

Quarterly attended noise monitoring will be undertaken during the approved operating hours, to ensure that all project-related operations are monitored. All attended noise monitoring will be conducted in accordance with the requirements of the following documents, as amended.

- Noise Policy for Industry (NPfI)
- NSW Industrial Noise Policy (EPA, 2000/2001)

- AS 1055.1-1997 “Acoustics – Description and Measurement of Environmental Noise – General Procedures”

Attended monitoring will be undertaken using a Type 1 integrating sound level meter with 1/3 octave filter and will be set to A-weighting (fast response). Low frequency noise modifying factors will be applied (if required) in accordance with fact sheet C2 of the NPfl (EPA 2018).

All acoustic instrumentation employed throughout the monitoring program will comply with the requirements of AS IEC 61672-2004, *Electroacoustics - Sound Level Meters*, as amended, and will carry current NATA or manufacturer calibration certificates. Instrument calibration will be checked before and after each survey, with the variation in calibrated levels not exceeding $\pm 0.5\text{dB(A)}$.

Where possible, measurements will be taken during the day, evening and night-time period at each monitoring location so that noise levels during the full range of operating times / activities are monitored.

Noise emission limits are to be applied under meteorological conditions of:

- Wind speeds up to 3m/s at 10 metres above ground level; and/or
- Temperature inversion conditions of up to 3 °C/100 metres.

The maximum ($L_{A\text{max}}$), and the energy equivalent ($L_{A\text{eq}}$) intrusive noise level from quarrying operations over a 15 minute measurement period will be recorded. If necessary, other descriptors such as L_{A10} , L_{A50} , L_{A90} , L_{A99} and $L_{A\text{min}}$ could also be recorded. Wherever possible, the L_{A90} noise level (i.e. without contributions from the Quarry) will be recorded to identify the prevailing background noise level compared with those recorded in 2001. Information that will be recorded during monitoring and about each location will include:

- the name of the person undertaking the monitoring;
- locations of the monitoring;
- recording intervals (date and times);
- meteorological conditions i.e. temperature, humidity, cloud cover, and wind speed and direction drawn from the on-site meteorological station;
- statistical noise level descriptors together with notes identifying the principal noise sources;
- instrument make, model, serial number and calibration details; and
- a brief description of activities occurring within the Quarry during the monitoring period.

11.2.4. Assessment Criteria

Condition 3(5) of PA 06_0193 identifies noise-related assessment criteria for the Quarry at five residences. However, as indicated in Section 11.2.2, in the interests of not unduly inconveniencing surrounding residents, Hanson intends to undertake noise monitoring on its own property at two locations, namely Locations N1, and N2. These locations are between the approved operations and the closest residences, namely “Hartley Cottage” and “Wheatfields.”

As a result, Mr Dick Godson of SLR has undertaken an assessment of equivalent noise levels at the Locations N1 and N2 that will ensure compliance with the approved noise criteria at surrounding residences. This assessment has been undertaken in accordance with the procedures outlined in Section 11.2.4 of the *Industrial Noise Policy*.

In summary, Mr Godson nominates the following noise levels at the monitoring locations. Compliance with these noise levels will, in the opinion of Mr Godson, ensure compliance with the approved assessment criteria at the residences identified in *PA Condition 3(5)*.

- Location N1 - 43dB(A).
- Location N2 - 50dB(A).

In order to confirm the assessment undertaken by Mr Godson, during the initial noise monitoring program, noise levels at Locations N1, N2, “Wheatfields” and “Hartley Cottage” will be monitored and compared with the predicted noise levels. If required, this plan will be adjusted to reflect any amendment to the relevant noise levels at Locations N1 and N2.

Any distinctive Quarry-generated noise sources (i.e. haul trucks, bulldozers, crushing and screening equipment, front-end loaders, road trucks etc.) will be recorded, together with any extraneous noise sources. In addition, Hanson will maintain copies of the relevant fixed plant and mobile equipment operating shift logs and extraction location(s) for inclusion in the noise monitoring report.

The Quarry Manager will be responsible for noise monitoring of Quarry activities. In the event of an exceedance of the relevant noise levels at Locations N1 and N2, the Noise Specialist will contact the Quarry Manager to inform of the location and time of the exceedance and then contact the relevant site personnel immediately following the monitoring advising them of the exceedance and informing them of the location, the margin of exceedance and the source(s) of emission.

With the finalisation of the Noise Monitoring Report, a copy must be provided to EPA no later than one month after the attended noise monitoring required within this management plan.

11.2.5. Supplementary Noise Surveys

In the event of a substantiated noise-related complaint or a landholder exercising their rights under *PA Condition 4(3)* to request an independent review of noise-related impacts, Hanson will undertake a supplementary attended noise survey as described in Section 11.2.3.

In addition, Hanson may, particularly during the initial construction stages of the Quarry, undertake supplementary attended noise surveys in accordance with the procedures identified in Section 11.2.3.

11.2.6. Meteorological Monitoring

All attended noise monitoring will be accompanied by a quantitative record of weather conditions during the monitoring period together with a qualitative description of weather conditions, including cloud cover, fog etc. The weather data during the periods of noise monitoring will be recorded through the use of the data collected at the on-site automated weather station which records.

- | | |
|-----------------------|------------------------|
| ▪ rainfall; | ▪ net solar radiation; |
| ▪ temperature at 10m; | ▪ sigma theta; |
| ▪ temperature at 2m; | ▪ wind direction; and |
| ▪ relative humidity; | ▪ wind speed. |

Figure 2 displays the location of the on-site meteorological station.

A copy of the investigation report and regular updates on the status of the identified corrective and/or preventative actions will be provided to the EPA and DP&I and, if required, the complainant, in accordance with the procedures identified in Sections 14 and 13 respectively. In addition, a copy of the report will be placed on the Quarry website and included in the *Annual Review*.

12. Evaluation of Compliance and Continual Improvement

A noise monitoring report will be prepared within 7 days of each attended noise monitoring event. This report will include an assessment of the monitoring results against the criteria identified in *PA Condition 3(5)*. Mitigation of any exceedances will be undertaken in accordance with the continual improvement program described in Section 15.

All monitoring reports will be reviewed by the Quarry Manager and a copy included within each *Annual Review*.

In the event that attended noise monitoring identifies an exceedance of the noise criteria identified in *PA Conditions 3(5)* or in Section 11.2.4, the exceedance will be investigated to determine the likely cause. The investigation will seek to determine:

- whether the exceedance of the criteria was directly related to a source associated with the Quarry or if environmental factors contributed to the exceedance;
- the primary cause of the incident;
- any contributing factors which led to the incident;
- whether appropriate controls were implemented to prevent the incident; and
- corrective and preventative measures that may be implemented to prevent a recurrence of the incident.

Corrective and/or preventative actions will be assigned to relevant Hanson personnel. Actions will be communicated internally through planning meetings and toolbox talks and outstanding actions will be monitored for their effectiveness upon completion.

13. Complaints Handling and Response

The *Environmental Management Strategy* as required by *PA Condition 5(1)* includes a detailed complaints handling and dispute resolution procedure. This sub-section records the procedures that would be implemented following receipt of a noise-related complaint.

Noise-related complaints may be received either via one of the following methods.

- Directly via the 24-hour, 7 day per week General Emergency Line (1800 882 478). This number will be advertised widely in the local media, on signage at the Quarry Site entrance and on the Hanson web site (www.hanson.com.au).
- Directly via a dedicated email address which will be advertised in a similar manner to the Community Information Line.
- Indirectly via the relevant government agencies.

All complaints will be registered in a database and responded to within one business day from the receipt of the complaint. The following information will be recorded in the database (where it can be reasonably obtained).

- The date and time the complaint was made.

- The complainant's name.
- The complainant's contact details (e.g. telephone number, email address).
- Details regarding the nature of the complaint.

The nature of Hanson's response to a complaint will depend on the nature and source of the complaint but will include one or more of the following actions.

1. The complaint will be reviewed by the Quarry Manager or their delegate to determine the nature, date and time of the complaint and associated issue.
2. Liaison with the complainant to ascertain all details and to identify the nature and source of the complaint and provide supplementary details for the complaints log. Details recorded in the log will include:
 - the date and time of the complaint;
 - the method by which the complaint was made;
 - details of the person making the complaint;
 - the nature of the complaint;
 - action taken in relation to the complaint including any follow-up contact with the complainant; and
 - if no action is taken, the reason why no action was taken.
3. A supplementary attended noise survey will be undertaken in accordance with the procedures identified in Section 11.2. The resulting attended noise monitoring report will be provided to the complainant on receipt.
4. Should the noise monitoring report indicate that no exceedance of the criteria identified in *PA Conditions 3(5)*, the Quarry Manager will continue to consult with the complainant in relation to managing noise emissions within the Quarry.
5. Should the attended noise monitoring report indicate that an exceedance of the criteria identified in *PA Conditions 3(5)* the Quarry Manager will notify the Department of Planning, Industry and Environment and Environment Protection Authority and will implement the procedures identified in Section 14 and implement the procedures identified in Section 12. In addition, the Quarry Manager will continue to consult with the complainant, as required, in relation to the complaint
6. Initiation of appropriate changes in operating practices or procedures.
7. Conducting a follow-up interview with the complainant to determine their level of satisfaction with the response and the resultant outcome.
8. In the event that multiple complaints are received from the same individual(s) and Hanson can demonstrate:
 - at least three attended noise surveys at the subject residence in question have demonstrated compliance with the criteria identified in *PA Conditions 3(5)*; and
 - there is documented evidence of a genuine attempt by Hanson to discuss the issue and seek a resolution with the complainant;
 - then Hanson may, in consultation with the EPA and / or Department of Planning, Industry and Environment, limit responses to further complaints to Steps 1 and 2 above.

A copy of the complaint report will be supplied to the complainant if requested. The complaints database on Hanson's website will be updated quarterly and a summary of all complaints

received in each 12 month period will be included in each Annual Review. The Quarry supervisor will be responsible for the recording of the complaint, response action requirements and updating of the database and website.

14. Incident Reporting

In the event that an initial investigation concludes that an exceedance of an environmental criterion was directly attributed to activities associated with the Quarry, as described in Section 12, the event will be reported to NSW Department of Planning, Industry and Environment and EPA within 24 hours of confirming the exceedance.

Within 7 days of identifying the exceedance, Hanson will submit a written report with regular updates on the status of the additional mitigation actions to the Secretary, EPA and, where relevant, the complainant, in accordance with the procedures identified in Section 12. In addition, a copy of all reports will be provided to the Community Consultative Committee, made publicly available on the Quarry website, and will be included in the *Annual Review*.

The Quarry Manager will be responsible for incident reporting.

15. Publication of Monitoring Information

Hanson will place a copy of all attended noise monitoring reports, as well as incident and noise exceedance investigation reports on Hanson's website.

In addition, Hanson will include all attended noise monitoring reports as appendices to the *Annual Review*. That document, once approved by the relevant government agencies, will be published on Hanson's website.

Finally, Hanson will also provide the Community Consultative Committee with a copy of all monitoring reports. The Quarry Manager will be responsible for publication of all relevant monitoring information.

16. Review

In accordance with *PA Condition 5(4)*, this *Noise Management Plan* will be reviewed and, if required, revised within 3 months of:

- the submission of an annual review under *PA Condition 5(3)*;
- the submission of an incident report under *PA Condition 5(6)*;
- the submission of an Independent Environmental Audit report under *PA Condition 5(8)*; and
- the approval of any modification to the conditions of PA 06_0193.

The Regional Manager will be responsible for the review of this Plan.

17. References

Heggies (2007) *Proposed Hard Rock Quarry, Guyong, NSW. Operational and Transportation Noise and Blasting Impact Assessment.* Prepared by Heggies Pty Ltd

Umwelt (2018) *East Guyong Quarry Modification 2. Noise Impact Assessment,* Prepared by Umwelt Pty Ltd.

18. Appendix A - Correspondence



Your reference : PA 06_0193
Our reference : EF13/3973; DOC18/665036-20
Contact : Lucy Apps, 02 6333 3800

Ms Belinda Pignone
Graduate Environment and Compliance Coordinator
Hanson Construction Materials PTY LTD
Locked Bag 5260
PARRAMATTA NSW 2124

7 August 2019

Dear Ms Pignone,

RE: East Guyong Quarry- Air Quality Monitoring Program and Noise Management Plan

I refer to Hanson's East Guyong Quarry Air Quality Monitoring and Noise Management Plan (the Draft Management Plans) received by the Environmental Protection Authority (EPA) on 15 July 2019.

Thank you for forwarding the Draft Management Plans to the EPA as required in accordance with Schedule 3, Condition 7 and Schedule 4, Condition 20, of Project Approval PA06_0193. The EPA encourages the development of Environmental Management Plans/Programs to ensure that proponents have determined how they will meet their statutory obligations and environmental objectives as specified by any Project/Development Approval and/or the conditions of an environment protection licence.

Please note the EPA does not review these plans/programs (unless in circumstances deemed necessary) as the role of the EPA is to set conditions/criteria for environmental protection and management, not to be directly involved in the development of strategies to comply with such conditions/criteria. As such on this occasion the EPA will not be reviewing or endorsing the plans.

As a management tool, such plans should assist Hanson in meeting its commitment to statutory compliance and wider environmental management and where appropriate should be integrated with other operational or management plans. The EPA recommends that such plans be audited to an industry standard or certified to the ISO 14001 standard (if applicable) as part of any overall environmental management system.

If you have any questions or wish to discuss this matter further, please contact Ms Lucy Apps at the EPA's Central West Bathurst office by telephoning 02 6333 3800 or by email at central.west@epa.nsw.gov.au

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Sandra Jones'.

DR SANDIE JONES
Head Regional Operations Central West
Environment Protection Authority