

MAC-ENC-MTP-032

DRAFT NOISE MANAGEMENT PLAN

Document Owner

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DRAFT

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1. Introduction

Hunter Valley Energy Coal Pty Limited operates the Mt Arthur Coal Complex which consists of open cut and underground mining operations, a rail loop and associated rail loading facilities. The operations are located in the Upper Hunter Valley, NSW approximately five kilometres south west of Muswellbrook. The Mt Arthur Underground operation has not commenced. This management plan will be reviewed and updated prior to the commencement of underground operations.

Open cut mining is conducted via a multi-bench, multi-strip shovel and excavator operations, which provide for the greatest operational flexibility and efficiency in the staged recovery of the coal resource at Mt Arthur Coal.

Coal handling and processing is undertaken at the centralised coal handling and preparation plant. A range of infrastructure, including administration offices, bathhouses, workshops and storage facilities, supports approved mining operations at Mt Arthur Coal. Product coal is transported via the rail loading facility for export and via conveyor to Macquarie Generation for domestic power generation. Mining activities occur 24 hours per day 7 days per week.

This Noise Management Plan has been prepared to detail the relevant noise impact assessment criteria, compliance procedures and controls relating to mining activities. This Plan has been prepared to fulfil the Department of Planning and Infrastructure (DoPI) Project Approval (09_0062) dated 24 September 2010, and the NSW Office of Environment and Heritage (OEH) Environment Protection Licence (EPL) conditions, which are presented in Appendix 1. Where there are conflicts between the Project Approval and the EPL, the Project Approval conditions have been used. It is proposed to update the EPL to reflect conditions in the Project Approval.

1.1. Objectives

The objectives of this Noise Management Plan are to:

- Ensure all relevant statutory requirements and BHP Billiton Policies and Standards are met;
- Manage and minimise the impact of noise from mining operations on the community and environment;
- Maintain an effective response mechanism to deal with issues and complaints; and
- Ensure the results of noise monitoring comply with applicable criteria.

1.2. Environmental Management System

Mt Arthur Coal has a firm commitment to minimising the impact of its operations on the local environment and community, and has a comprehensive Environmental Management System (EMS) in place to fulfil this commitment. This Noise Management Plan is a component of the Mt Arthur Coal EMS.

1.3. Consultation Process

This Noise Management Plan has been prepared in consultation with DoPI and OEH. In accordance with condition 11 of schedule 5 this Noise Management Plan will be made available for public information on the Mt Arthur Coal website.

2. Statutory Requirements

This Noise Management Plan has been developed to meet the Project Approval conditions associated with noise management, specifically Schedule 3, Condition 2 to 7 which address environmental noise by providing criteria for impact, acquisition, cumulative, traffic and additional noise mitigation. Conditions 8 and 9 of Schedule 3 specify operating conditions and noise management plan requirements.

Appendix 1 provides a complete summary of all project approval conditions, EPL conditions and relevant commitments detailed in the Environmental Assessment associated with this noise management plan and noise monitoring program.

3. Baseline Data Requirements

Baseline data was gathered as part of the Environmental Assessment (EA) process for the Mt Arthur Coal Complex Project Approval (09_0062). An extensive review of noise levels monitored around the mine is presented in Appendix G of the Mt Arthur Coal Consolidation Project Environmental Assessment (Wilkinson Murray, November 2009). Section 5 of the document describes noise data gathered in 1999 and 2008 that were used to determine criteria for noise sensitive receptor areas.

4. Compliance Measures

Chapter 7 of the OEH Industrial Noise Policy (INP) addresses methods of mitigating noise from industrial sources and has been referenced for description/categorisation of measures implemented by Mt Arthur Coal to ensure compliance with consent limits.

The INP describes the following options for noise mitigation as detailed below:

Essentially, there are three main mitigation strategies for noise control:

- Controlling noise at the source.
- There are two approaches: Best Management Practice (BMP) and Best Available Technology Economically Achievable (BATEA). These are described in Section 7.
- Controlling the transmission of noise.

- There are two approaches: the use of barriers and land-use controls—which attenuate noise by increasing the distance between source and receiver. These are detailed in Section 7.3.
- Controlling noise at the receiver.
- Examples of controlling noise at the receiver include the installation of double glazing windows, air condition or insulation.

These noise mitigation strategies follow the hierarchy of control, with source control always being the preferred option where reasonable and feasible, and control at the receiver the least favourable option. Implementation by Mt Arthur Coal of each of the three strategies is addressed in the following sections.

4.1. Controlling Noise at the Source

Where necessary, in the event of any exceedance or complaint, Mt Arthur Coal will investigate relevant noise sources to determine if any feasible and reasonable noise reductions can be implemented.

4.1.1. Mobile plant

The Mt Arthur Coal document “Specification For Measurement Of Noise Levels Of Earthmoving Machinery And Associated Equipment To Be Used At Mt Arthur North Mine” (Version D, June 2001) is a specification that limits mobile plant noise emissions.

The specification is very specific in regard to noise emissions and test methods (a combination of Australian and international standards) and machine operating configurations for testing. The sound power specification is applied to most new mobile plant, and a sample of site mobile plant is tested on an annual basis to ensure ongoing compliance with the specification. Any items identified as being outside the allowed parameters are reported to the maintenance department for rectification.

4.1.2. Fixed infrastructure

The Mt Arthur Coal maintenance workshops and associated infrastructure were strategically located to be well away from receptors.

Design of the CHPP incorporates extensive cladding of bins, crushers, conveyors and the washery. Low noise conveyors are specified throughout.

4.2. Controlling Noise Transmission

A major noise barrier scheme has been implemented at Mt Arthur Coal since the project inception. The primary barriers are listed below:

1. A 40 metre high bund adjacent the washery to control noise from the CHPP infrastructure and ROM; and
2. A 4.2 kilometre long bund to reduce pit activity noise in the direction of Muswellbrook.
3. Noise fencing is employed where possible along the rail spur to reduce noise transmission in the Antiene area.

Effectiveness of this barrier scheme has been demonstrated by ongoing compliance at South Muswellbrook with regulatory limits.

4.3. Controlling Noise at the Receiver

This is the least preferred control option, and is applied when all other methods of noise control have been evaluated and implemented with further improvements required for the receptor. If further works are required, the most effective options are evaluated by a noise specialist in order to maximise the chances of success in mitigation. This would be undertaken on an as needs basis and could include noise mitigation measures such as double glazing, air conditioning, or insulation.

5. Monitoring Program

The *MAC-ENC-PRO-056 Noise Monitoring Program* has been prepared as a separate document to this management plan and addresses the following:

- Real time monitoring methodology;
- Attended monitoring methodology;
- Monitoring locations (real time and attended);
- Monitoring frequency; and
- Data analysis and reporting.

The monitoring program is designed to ensure adequate monitoring takes place to confirm compliance with the Project Approval, and determining exceedances. It is specific as to how and when monitoring is undertaken and provides guidelines for analysis and reporting.

Additional information is provided in the monitoring program relating to maintenance and calibration of the real time monitoring system.

6. Contingency Plan

The Mt Arthur Coal real time monitoring system automatically provides alarms to site personnel if noise levels are approaching regulatory limits, as detailed in document *MAC-ENC-PRO-041 Real Time Monitoring Response (RTMR)*,.

The RTMR contains a procedure to be followed by the Open Cut Examiners as follows:

- Determine if noise is mining related;
- Review and change operations if mining noise is an issue; and
- Confirm success of change or take further actions until situation is satisfactory.

Implementation of this system and procedure should cater for most situations where there are unpredicted noise impacts, and, represents Best Available Technology Economically Achievable.

7. Performance improvement

Mt Arthur Coal will evaluate new technology and alternative operating methods, as they become known. Those found to be reasonable, feasible and effective in noise control, that do not impose undue safety or economic constraints, will be implemented.

Particular attention will be paid to mobile plant noise control, primarily in regard to trucks and dozers. These are the major site noise sources and currently represent the area of most development by equipment manufacturers.

Noise monitoring and sound power testing results will be evaluated on an ongoing basis to clearly ascertain Mt Arthur Coals current performance and, the extent of improvement that may be required.

Additionally, an annual noise model will be prepared, when detailed mine planning for the coming winter months has been completed, to predict likely levels in the surrounding environment. This allows any potential impacts to be addressed in advance of this mining taking place.

During appropriate seasonal conditions, (Winter 2012) Mt Arthur Coal will examine the correlation between weather conditions and noise levels to allow procedures to be developed for the proactive management of predicted noise impacts based on the prediction of noise levels in relevant weather conditions. This Noise Management Plan will be reviewed based on the outcomes of this study, and in consultation with the DoPI.

8. Incidents, Complaints and Exceedances

8.1. Complaint Response

All noise complaints received in relation to Mt Arthur Coal's operations will be responded to in accordance with *MAC-ENC-PRO-042 Community and Environmental Incident Response and Reporting* and Condition M4.1 of EPL 11457. These provide details on how to receive, handle, respond to, record and action community complaints.

Upon receipt of a complaint from the community, preliminary investigations will commence as soon as practicable to determine the likely causes of the complaint using information such as the prevailing climatic conditions, the nature of activities taking place and recent monitoring results. A response will be provided as soon as practicable, which may include the provision of relevant monitoring data if requested.

Where specific complaints are received in relation to noise at a particular residence, attended noise monitoring may be undertaken at or near the complainant's residence if the Environment and Community Manager deems the complaint likely to be valid.

Every effort will be made to ensure that concerns are addressed in a manner that facilitates a mutually acceptable outcome for both the complainant and Mt Arthur Coal. If required, the Noise Affected Property Management Procedure (Appendix 2) will be entered into.

8.2. Complaints Register

Mt Arthur Coal will record all community complaints into the site event management database in accordance with *MAC-ENC-PRO-042 Community and Environmental Incident Response and Reporting*. The database is maintained to include reporting, incident/event notification, close out action tracking, risk management, inspection, audits and document management.

8.3. Exceedance Protocol

8.3.1. Attended Monitoring Exceedance

In situations where attended noise results are identified as exceeding the impact assessment criteria, the following actions will be undertaken:

- The Environmental Coordinator must be notified as soon as practicable of any exceedance identified during attended monitoring;
- The Open Cut Examiner, and or the Environmental Coordinator, and noise consultants will investigate the results of the noise monitoring for the potential causes for the exceedance;
- The Director-General, OEH and any other relevant agencies will be contacted as soon as practicable after the exceedance becomes know in accordance with Condition L6.1 of the EPL and Schedule 5, Condition 7 of the Project Approval;

- Mt Arthur Coal will initiate investigations as to the cause of the exceedance and prepare a detailed report of the incident;
- Mt Arthur Coal will prepare a detailed report as a result of the investigation and provide the Director-General, OEH and any other relevant agencies, with the report within 7 days of the incident in accordance with Schedule 5, Condition 7 of the Project Approval;
- If no recognisable causes can be identified further investigations may be undertaken to identify the cause e.g. specific weather or atmospheric conditions;
- Where the cause is identified, additional controls will be implemented or the operational method will be altered;
- Additional monitoring may be required as a follow up to determine the effectiveness of any corrective actions implemented;
- Any corrective action will be recorded and reported to the Environmental Coordinator who will keep a record of all significant proactive and reactive actions; and
- The Environmental Coordinator will be informed of any complaint and details must be recorded in the site event management database in addition to response and actions taken.

8.3.2. Real Time Noise Monitoring Exceedance

The protocol associated with real time noise monitoring exceedances is described in Section 7 Contingency Planning of this plan.

8.3.3. Independent Review

In the event that a landowner of privately owned land considers the project to be exceeding the impact assessment criteria in schedule 3, an independent review will be undertaken in accordance with Condition 4 of Schedule 4. Refer to Figure 1: Noise Affected Property Management Procedures, for a summary of the stages involved in noise management procedures and an independent review.

9. Reporting and Review

9.1. Reporting

Mt Arthur Coal will report on the performance of the Noise Monitoring Program in the Annual Environmental Management Report (AEMR) and provide regular updates to members of the Community Consultative Committee (CCC). The AEMR will include:

- Noise monitoring results and comparison to performance criteria;
- Noise related complaints and management/mitigation measures undertaken;
- Management/mitigation measures undertaken in the event of any confirmed exceedance of performance criteria; and

- Review of the performance of management/mitigation measures and the monitoring program.

The AEMR will also be submitted to the CCC and made available for public information on Mt Arthur Coal's website.

The Annual Return for EPL11457 will include a noise monitoring and complaints summary in accordance with condition R1.1.

9.2. Review

This NMP and associated monitoring plan will be reviewed, and if necessary revised to the satisfaction of the Director-General (in consultation with relevant government agencies) in accordance with Condition 4 of Schedule 5 of the Project Approval:

- within 3 months of the submission of an:
 - annual review under Condition 3, Schedule 5 of the Project Approval;
 - incident report under Condition 7, Schedule 5 of the Project Approval;
 - Independent Environmental Audit report under Condition 9, Schedule 5 of the Project Approval;
 - Modification to the conditions of the Project Approval.
- When there are changes to project approval or licence conditions relating to noise management or monitoring;
- Following significant incidents at Mt Arthur Coal relating to noise;
- Following the conduct of an independent environmental audit which requires changes to the Noise Management Plan or to the Noise monitoring practices; or
- If there is a relevant change in technology or legislation.

10. References

BHP Billiton (2007), The Mt Arthur North Coal Project Environmental Impact Statement.

Hansen Bailey (2009), Mt Arthur Coal Consolidation Project Environmental Assessment.

Department of Environment, Climate Change and Water (12 November 2009) Environmental Protection Licence 11457

Environment Protection Authority (January 2000) NSW Industrial Noise Policy

Department of Planning, Minister of Planning's Project Approval document (dated 29 September 2010, Application Number 09-0062, Mt Arthur Coal Mine – Open Cut Consolidation Project.

Mt Arthur Coal (Version D, 2001) “*Specification For Measurement Of Noise Levels Of Earthmoving Machinery And Associated Equipment To Be Used At Mt Arthur North Mine*”

Mt Arthur Coal EMS Documents

MAC-ENC-PRO-001 EMS Review

MAC-ENC-PRO-056 Noise Monitoring Program

MAC-ENC-PRO-008 Communication and Reporting

MAC-ENC-PRO-042 Environmental Incident Response and Reporting

MAC-ENC-PRO-041 Real Time Monitoring Response

Appendix 1: Project Approval and EPL Conditions

Table 1: Project approval and EPL conditions

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section																																								
Open Cut Consolidation Project Approval	3:2	<p>NOISE Impact Assessment Criteria</p> <p>2. The Proponent shall ensure that the noise generated by the Mt Arthur mine complex does not exceed the noise impact assessment criteria in Table 2 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, except where such exceedance is predicted in the EA. For these properties, the Proponent shall comply with the noise level predictions in the EA.</p> <p>However, these 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.</p> <p>Table 2: Noise Impact Assessment Criteria dB(A)</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #333; color: white;"> <th style="text-align: left;">Location</th> <th style="text-align: center;">Day (LAeq(15min))</th> <th style="text-align: center;">Evening (LAeq(15min))</th> <th style="text-align: center;">Night (LAeq(15min))</th> <th style="text-align: center;">Night (LA1(1min))</th> </tr> </thead> <tbody> <tr> <td>A – Antiene Estate</td> <td style="text-align: center;">37</td> <td style="text-align: center;">40</td> <td style="text-align: center;">38</td> <td style="text-align: center;">45</td> </tr> <tr> <td>B – Skelletar Stock Route, Thomas Mitchell Drive, Denman Road East</td> <td style="text-align: center;">39</td> <td style="text-align: center;">38</td> <td style="text-align: center;">37</td> <td style="text-align: center;">45</td> </tr> <tr> <td>C – Racecourse Road</td> <td style="text-align: center;">41</td> <td style="text-align: center;">40</td> <td style="text-align: center;">39</td> <td style="text-align: center;">45</td> </tr> <tr> <td>D – Denman Road North-west, Roxburgh Vineyard (north-east), Roxburgh Road</td> <td style="text-align: center;">37</td> <td style="text-align: center;">36</td> <td style="text-align: center;">35</td> <td style="text-align: center;">45</td> </tr> <tr> <td>E – South Muswellbrook</td> <td style="text-align: center;">39</td> <td style="text-align: center;">39</td> <td style="text-align: center;">39</td> <td style="text-align: center;">45</td> </tr> <tr> <td>F – Denman Road West, Roxburgh Vineyard (west)</td> <td style="text-align: center;">37</td> <td style="text-align: center;">36</td> <td style="text-align: center;">35</td> <td style="text-align: center;">45</td> </tr> <tr> <td>G – East Antiene</td> <td style="text-align: center;">41</td> <td style="text-align: center;">40</td> <td style="text-align: center;">39</td> <td style="text-align: center;">45</td> </tr> </tbody> </table>	Location	Day (LAeq(15min))	Evening (LAeq(15min))	Night (LAeq(15min))	Night (LA1(1min))	A – Antiene Estate	37	40	38	45	B – Skelletar Stock Route, Thomas Mitchell Drive, Denman Road East	39	38	37	45	C – Racecourse Road	41	40	39	45	D – Denman Road North-west, Roxburgh Vineyard (north-east), Roxburgh Road	37	36	35	45	E – South Muswellbrook	39	39	39	45	F – Denman Road West, Roxburgh Vineyard (west)	37	36	35	45	G – East Antiene	41	40	39	45	<p>4.0</p> <p>5.0</p> <p>6.0</p> <p>8.0</p> <p>Appendix 2</p>
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Open Cut Consolidation Project Approval	3:3	<p>Land Acquisition Criteria</p> <p>1. If the noise generated by the Mt Arthur mine complex exceeds the criteria in Table 3 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 7-8 of schedule 4.</p> <p>Table 3: Land Acquisition criteria dB(A) LAeq (15min)</p> <table border="1" data-bbox="669 890 1774 1236"> <thead> <tr> <th>Location</th> <th>Day</th> <th>Evening</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>A – Antiene Estate</td> <td>42</td> <td>45</td> <td>43</td> </tr> <tr> <td>B – Skelletar Stock Route, Thomas Mitchell Drive, Denman Road East</td> <td>44</td> <td>43</td> <td>42</td> </tr> <tr> <td>C – Racecourse Road</td> <td>46</td> <td>45</td> <td>44</td> </tr> <tr> <td>D – Denman Road North-west, Roxburgh Vineyard (north-east), Roxburgh Road</td> <td>42</td> <td>41</td> <td>40</td> </tr> <tr> <td>E – South Muswellbrook</td> <td>44</td> <td>44</td> <td>44</td> </tr> <tr> <td>F – Denman Road West, Roxburgh Vineyard (west)</td> <td>42</td> <td>41</td> <td>40</td> </tr> <tr> <td>G – East Antiene</td> <td>46</td> <td>45</td> <td>44</td> </tr> </tbody> </table> <p>Notes:</p> <ul style="list-style-type: none"> To interpret the locations referred to Table 3, see the applicable figures in Appendix 5. 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. 	Location	Day	Evening	Night	A – Antiene Estate	42	45	43	B – Skelletar Stock Route, Thomas Mitchell Drive, Denman Road East	44	43	42	C – Racecourse Road	46	45	44	D – Denman Road North-west, Roxburgh Vineyard (north-east), Roxburgh Road	42	41	40	E – South Muswellbrook	44	44	44	F – Denman Road West, Roxburgh Vineyard (west)	42	41	40	G – East Antiene	46	45	44	<p>5.0 8.0 Appendix 2</p>
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		<ul style="list-style-type: none"> For this condition to apply, the exceedance of the criteria must be systemic. 									
Open Cut Consolidation Project Approval	3:4	<p>Cumulative Noise Criteria</p> <p>4. Except for the noise-affected land in Table 1, the Proponent shall implement all reasonable and feasible measures to ensure that the noise generated by the Mt Arthur mine complex combined with the noise generated by other mines and industries does not exceed the criteria in Table 4 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land.</p> <p>Table 4: Cumulative noise impact assessment criteria dB(A) LAeq (period)</p> <table border="1" data-bbox="568 740 1774 804"> <thead> <tr> <th>Location</th> <th>Day</th> <th>Evening</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>All privately-owned land</td> <td>50</td> <td>45</td> <td>40</td> </tr> </tbody> </table> <p>Note: Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.</p>	Location	Day	Evening	Night	All privately-owned land	50	45	40	<p>4.0 5.0 8.0 Appendix 2</p>
Location	Day	Evening	Night								
All privately-owned land	50	45	40								
Open Cut Consolidation Project Approval	3:5	<p>5. If the cumulative noise generated by the Mt Arthur mine complex combined with the noise generated by other mines exceeds the criteria in Table 5 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, then upon receiving a written request from the landowner, the Proponent shall acquire the land on as equitable basis as possible with the relevant mines, in accordance with the procedures in conditions 7-8 of schedule 4.</p> <p>Table 5: Cumulative noise land acquisition criteria dB(A) LAeq (period)</p> <table border="1" data-bbox="568 1214 1774 1278"> <thead> <tr> <th>Location</th> <th>Day</th> <th>Evening</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>All privately-owned land</td> <td>55</td> <td>50</td> <td>45</td> </tr> </tbody> </table> <p>Note: The cumulative noise generated by the Mt Arthur mine complex combined with the noise generated by other mines is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.</p>	Location	Day	Evening	Night	All privately-owned land	55	50	45	<p>4.0 5.0 8.0 Appendix 2</p>
Location	Day	Evening	Night								
All privately-owned land	55	50	45								

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section									
Open Cut Consolidation Project Approval	3:6	<p>Traffic Noise Impact Assessment Criteria</p> <p>1. The Proponent shall take all reasonable and feasible measures to ensure that the traffic noise generated by the Mt Arthur mine complex does not exceed the traffic noise impact assessment criteria in Table 6, except where such an exceedance is predicted in the EA. For these properties, the Proponent shall comply with the noise levels predicted in the EA.</p> <p>Table 6: Traffic noise impact assessment criteria dB(A)</p> <table border="1" data-bbox="568 643 1776 823"> <thead> <tr> <th data-bbox="568 643 1093 699">Road</th> <th data-bbox="1093 643 1373 699">Day / Evening (LAeq(1 hour))</th> <th data-bbox="1373 643 1776 699">Night (LAeq(1 hour))</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 699 1093 762">Thomas Mitchell Drive, Denman Road (east of Thomas Mitchell Drive)</td> <td data-bbox="1093 699 1373 762">60</td> <td data-bbox="1373 699 1776 762">55</td> </tr> <tr> <td data-bbox="568 762 1093 823">Denman Road (west of Thomas Mitchell Drive)</td> <td data-bbox="1093 762 1373 823">55</td> <td data-bbox="1373 762 1776 823">50</td> </tr> </tbody> </table> <p>Note: Traffic noise generated by the Mt Arthur mine complex is to be measured in accordance with the relevant procedures in the OEH's Environmental Criteria for Road Traffic Noise.</p>	Road	Day / Evening (LAeq(1 hour))	Night (LAeq(1 hour))	Thomas Mitchell Drive, Denman Road (east of Thomas Mitchell Drive)	60	55	Denman Road (west of Thomas Mitchell Drive)	55	50	5.0
Road	Day / Evening (LAeq(1 hour))	Night (LAeq(1 hour))										
Thomas Mitchell Drive, Denman Road (east of Thomas Mitchell Drive)	60	55										
Denman Road (west of Thomas Mitchell Drive)	55	50										
Open Cut Consolidation Project Approval	3:7	<p>7. Upon receiving a written request from the owner of any residence:</p> <p>(a) on the noise affected land listed in Table 1;</p> <p>(b) on the land listed in Table 7;</p> <p>(c) on any other privately-owned land where subsequent operational noise monitoring shows the noise generated by the Mt Arthur mine complex exceeds the noise limits in Table 2 by more than 2 decibels; and</p> <p>(d) on Thomas Mitchell Drive or Denman Road where subsequent noise monitoring shows traffic noise levels generated by the Mt Arthur mine complex exceed the traffic noise criteria in Table 6, the Proponent shall implement reasonable and feasible noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at any residence in consultation with the owner. If within 3 months of receiving this request from the landowner, the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.</p>	4.0 5.0 8.0 Appendix 2									

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section																										
		<p>Table 7: Land subject to additional noise mitigation upon request</p> <table border="1" data-bbox="568 456 1774 866"> <thead> <tr> <th data-bbox="568 456 831 488">Receiver No.</th> <th data-bbox="831 456 1774 488">Receiver</th> </tr> </thead> <tbody> <tr> <td data-bbox="568 488 831 520">11</td> <td data-bbox="831 488 1774 520">Drake</td> </tr> <tr> <td data-bbox="568 520 831 552">12</td> <td data-bbox="831 520 1774 552">Tubb</td> </tr> <tr> <td data-bbox="568 552 831 584">13</td> <td data-bbox="831 552 1774 584">Turner & Upper Hunter Developers P/L</td> </tr> <tr> <td data-bbox="568 584 831 616">39, 40</td> <td data-bbox="831 584 1774 616">Buckley</td> </tr> <tr> <td data-bbox="568 616 831 647">41</td> <td data-bbox="831 616 1774 647">Ray</td> </tr> <tr> <td data-bbox="568 647 831 679">42</td> <td data-bbox="831 647 1774 679">Hallet & Campbell</td> </tr> <tr> <td data-bbox="568 679 831 711">49</td> <td data-bbox="831 679 1774 711">Webber</td> </tr> <tr> <td data-bbox="568 711 831 743">94</td> <td data-bbox="831 711 1774 743">Skinner</td> </tr> <tr> <td data-bbox="568 743 831 775">97</td> <td data-bbox="831 743 1774 775">Clifton</td> </tr> <tr> <td data-bbox="568 775 831 807">98</td> <td data-bbox="831 775 1774 807">Jones</td> </tr> <tr> <td data-bbox="568 807 831 839">99</td> <td data-bbox="831 807 1774 839">Hunter (2 residences)</td> </tr> <tr> <td data-bbox="568 839 831 871">100</td> <td data-bbox="831 839 1774 871">Sharman</td> </tr> </tbody> </table> <p>Note: To interpret the locations referred to in Table 7, see the applicable figure in Appendix 5.</p>	Receiver No.	Receiver	11	Drake	12	Tubb	13	Turner & Upper Hunter Developers P/L	39, 40	Buckley	41	Ray	42	Hallet & Campbell	49	Webber	94	Skinner	97	Clifton	98	Jones	99	Hunter (2 residences)	100	Sharman	
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Open Cut Consolidation Project Approval	3:8	<p>Operating Conditions</p> <p>8. The Proponent shall:</p> <ul style="list-style-type: none"> (a) implement best noise management practice, which includes implementing all reasonable and feasible noise mitigation measures; (b) ensure that the real-time noise monitoring and meteorological forecasting data are assessed regularly, and that mining operations are relocated, modified and/or suspended to ensure compliance with the relevant conditions of this approval; and (c) regularly investigate ways to reduce the operational, low frequency, rail and road traffic noise generated by the project, and report on these investigations in the annual review (see condition 3 of schedule 5), to the satisfaction of the Director-General. 	<p>4.0</p> <p>5.0 & 6.0</p> <p>7.0</p>																										
Open Cut Consolidation Project Approval	3:9	<p>Noise Management Plan</p> <p>9. The Proponent shall prepare and implement a Noise Management Plan for the Mt Arthur mine complex to the satisfaction of the Director-General. This plan must:</p>	This Plan																										

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section
Open Cut Consolidation Project Approval	3:9	(a) be prepared in consultation with OEH, and be submitted to the Director-General for approval by the end of March 2011;	1.3
Open Cut Consolidation Project Approval	3:9	(b) describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time noise management system; and	4.0 5.0 6.0 8.0
Open Cut Consolidation Project Approval	3:9	(c) include a noise monitoring program, that uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the Mt Arthur mine complex, and includes a protocol for determining exceedances of the relevant conditions in this approval.	5.0
Open Cut Consolidation Project Approval	4:7	<p>LAND ACQUISITION</p> <p>7. Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on:</p> <p>(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 project, having regard to the:</p> <ul style="list-style-type: none"> • 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, but excluding any improvements that have resulted from the implementation of the 'additional noise mitigation measures' in condition 7 of schedule 3, 'additional air quality mitigation measures' in condition 22 of schedule 3, or 'compensatory water supplies' in condition 34 of schedule 3; <p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> • relocating within the Muswellbrook, Singleton or Scone local government area, or to any other local government area determined 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 to be acquired; and 	8.0 Appendix 2

Consent/Licence	Schedule : Condition	<i>Condition / Requirement</i>	Management Plan Section
		<p>(c) reasonable compensation for any disturbance caused by the land acquisition process.</p> <p>However, if at the end of this period, the Proponent 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.</p> <p>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 to:</p> <ul style="list-style-type: none"> • consider submissions from both parties; • determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above; • prepare a detailed report setting out the reasons for any determination; and • provide a copy of the report to both parties. <p>Within 14 days of receiving the independent valuer's report, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.</p> <p>However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Director-General for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Director-General shall determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, and the detailed report of the party that disputes the independent valuer's determination. Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General's determination.</p> <p>If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Director-General determines otherwise.</p>	
Open Cut Consolidation	4:8	8. The Proponent shall pay all reasonable costs associated with the land acquisition process described in condition 7 above, including the costs associated with obtaining Council approval	8.0 Appendix 2

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section
Project Approval		for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.	
Open Cut Consolidation Project Approval	5:2	Management Plan Requirements 2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:	This Plan
Open Cut Consolidation Project Approval	5:2	(a) detailed baseline data;	3.0
Open Cut Consolidation Project Approval	5:2	(b) a description of: <ul style="list-style-type: none"> • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; • 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; 	2.0 Appendix 1
Open Cut Consolidation Project Approval	5:2	(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	4.0
Open Cut Consolidation Project Approval	5:2	(d) a program to monitor and report on the: <ul style="list-style-type: none"> • impacts and environmental performance of the project; • effectiveness of any management measures (see c above); 	5.0
Open Cut Consolidation Project Approval	5:2	(e) a contingency plan to manage any unpredicted impacts and their consequences;	6.0
Open Cut Consolidation Project Approval	5:2	(f) a program to investigate and implement ways to improve the environmental performance of the project over time;	7.0

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section
Open Cut Consolidation Project Approval	5:2	(g) a protocol for managing and reporting any: <ul style="list-style-type: none"> • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and 	8.0
Open Cut Consolidation Project Approval	5:2	(h) a protocol for periodic review of the plan.	9.2
Open Cut Consolidation Project Approval	5:3	<p>Annual Review</p> <p>3. By the end of 2010, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:</p> <p>(a) describe the works that were carried out in the past year, and the works that are proposed to be carried out over the next year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against the</p> <ul style="list-style-type: none"> • the relevant statutory requirements, limits or performance measures/criteria; • the monitoring results of previous years; and • the relevant predictions in the EA; <p>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the project;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the next year to improve the environmental performance of the project.</p>	<p>9.0</p> <p>5.0</p> <p>9.0</p> <p>5.0</p> <p>9.0</p> <p>5.0</p> <p>9.0</p>
Open Cut Consolidation Project Approval	5:4	<p>Revision of Strategies, Plans and Programs</p> <p>4. Within 3 months of the submission of an:</p> <p>(a) annual review under condition 3 above;</p> <p>(b) incident report under condition 7 below;</p> <p>(c) audit under condition 9 below; and</p> <p>(d) any modification to the conditions of this approval, the Proponent shall review, and if necessary</p>	9.2

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section
		<p>revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.</p> <p>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.</p>	
Open Cut Consolidation Project Approval	5:7	<p>REPORTING Incident Reporting 7. The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of becoming aware of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.</p>	8.0
Open Cut Consolidation Project Approval	5:8	<p>Regular Reporting 8. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval, and to the satisfaction of the Director-General.</p>	9.0
Open Cut Consolidation Project Approval	5:11	<p>ACCESS TO INFORMATION 11. From the end of December 2010, the Proponent shall: (a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> • a copy of all current statutory approvals for the project; • a copy of the current environmental management strategy and associated plans and programs; • a summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval; • a complaints register, which is to be updated on a monthly basis; • a copy of the minutes of CCC meetings; • a copy of any Annual Reviews (over the last 5 years); • a copy of any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit; • any other matter required by the Director-General; and <p>(b) keep this information up to date, to the satisfaction of the Director-General.</p>	<p>-</p> <p>1.2</p> <p>9.0</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p> <p>-</p>

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section
Open Cut Consolidation Project Approval – Appendix 3 Statement of Commitments	1.	Mt Arthur Coal 's Environmental Monitoring Programs for air quality, water quality, noise and blasting will be reviewed and updated as required, in consultation with relevant regulators for approval by the Department.	5.0
Open Cut Consolidation Project Approval – Appendix 3 Statement of Commitments	6.	Mt Arthur Coal shall ensure that Project noise at the northern boundary of the Woodlands property does not exceed the lowest intrusive noise criteria provide by the EPA/OEH's Industrial Noise Policy of an RBL of 30 dBA LAeq (15 minutes) plus 5 dBA.	5.0
Open Cut Consolidation Project Approval – Appendix 3 Statement of Commitments	26.	Mt Arthur Coal will prepare a consolidated Annual Review (which summarises monitoring results and reviews performance) for the Mt Arthur Coal Complex and distribute it to the relevant regulatory departments.	9.0
EPL 11457	L6	Refer to Conditions 1, 2, 3, 4, 5, 6 and 7 of Schedule 3 in this table.	4.0 5.0 6.0 8.0 Appendix 2
EPL 11457	O2	O2 Maintenance of plant and equipment O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity: (a) must be maintained in a proper and efficient condition; and (b) must be operated in a proper and efficient manner.	4.0

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section
EPL 11457	M1.1	M1 Monitoring records M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	5.0
EPL 11457	M1.2	M1.2 All records required to be kept by this licence must be: (a) in a legible form, or in a form that can readily be reduced to a legible form; (b) kept for at least 4 years after the monitoring or event to which they relate took place; and (c) produced in a legible form to any authorised officer of the EPA who asks to see them.	5.0
EPL 11457	M1.3	M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence: (a) the date(s) on which the sample was taken; (b) the time(s) at which the sample was collected; (c) the point at which the sample was taken; and (d) the name of the person who collected the sample.	5.0
EPL 11457	M4.1	M4 Recording of pollution complaints M4.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	8.0
EPL 11457	M4.2	M4.2 The record must include details of the following: (a) the date and time of the complaint; (b) the method by which the complaint was made; (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; (d) the nature of the complaint; (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and (f) if no action was taken by the licensee, the reasons why no action was taken.	8.0
EPL 11457	M4.3	M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.	8.0
EPL 11457	M4.4	M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.	8.0
EPL 11457	M7.1	M7 Requirement to monitor noise M7.1 Every 12 months the Licensee must monitor noise from the premises in accordance with	5.0

Consent/Licence	Schedule : Condition	Condition / Requirement	Management Plan Section																				
		condition L6 to determine compliance with the limits specified in condition L6.1.																					
EPL 11457	M7.3	<p>M7.3 The licensee must monitor (by sampling and obtaining results by analysis) each weather parameter specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:</p> <table border="1" data-bbox="568 571 1749 730"> <thead> <tr> <th>Parameter</th> <th>Units of Measure</th> <th>Frequency</th> <th>Sampling Method</th> </tr> </thead> <tbody> <tr> <td>Air Temperature</td> <td>°C</td> <td>Continuous</td> <td>Instrumental</td> </tr> <tr> <td>Wind Direction</td> <td>Degrees</td> <td>Continuous</td> <td>Instrumental</td> </tr> <tr> <td>Wind Speed or run</td> <td>m/s</td> <td>Continuous</td> <td>Instrumental</td> </tr> <tr> <td>Rainfall</td> <td>mm</td> <td>Daily</td> <td>Instrumental</td> </tr> </tbody> </table>	Parameter	Units of Measure	Frequency	Sampling Method	Air Temperature	°C	Continuous	Instrumental	Wind Direction	Degrees	Continuous	Instrumental	Wind Speed or run	m/s	Continuous	Instrumental	Rainfall	mm	Daily	Instrumental	
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EPL 11457	R1	<p>R1 Annual return documents What documents must an Annual Return contain? R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: (a) a Statement of Compliance; and (b) a Monitoring and Complaints Summary. A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.</p>	9.0																				

Appendix 2: Noise Affected Property Management Procedure

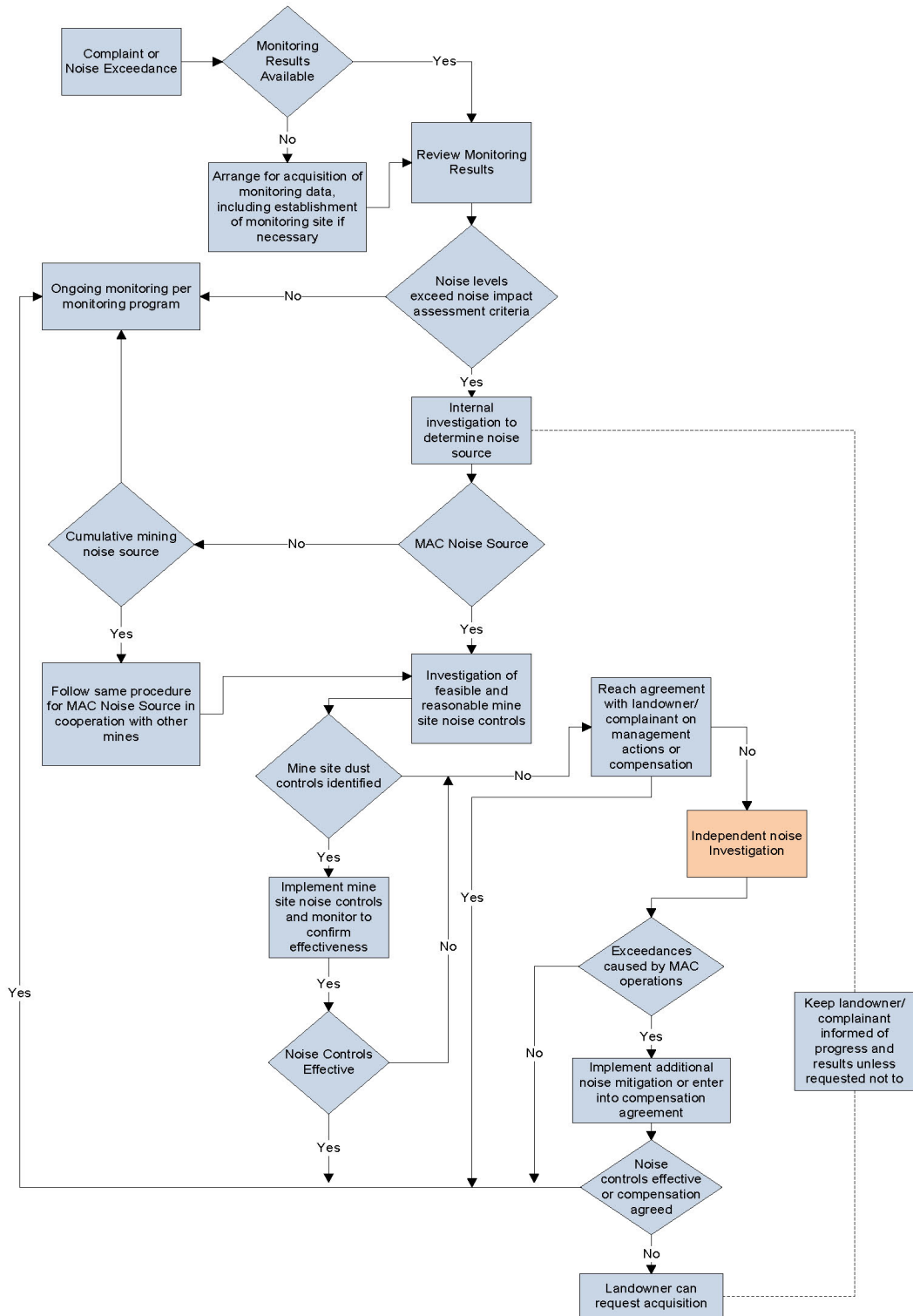


Figure 1: Noise Affected Property Management Procedures