



In accordance with Condition 4, Schedule 5 of PA08_0184 this plan has been subject to updates and revisions submitted to the NSW Department of Planning, Industry and Environment (DPIE) (See Change Information Section 7.4). The Effective date of this document represents the latest acknowledgement from DPIE that this plan has been prepared to the satisfaction of the Director-General.

Noise Management Plan

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1 Commitment and Policy

1.1 Introduction

Ulan Coal Mines Pty Limited (UCMPL) is situated in the central west of New South Wales. It is located in the Mid Western Regional Council (MWRC) Local Government Area (LGA) near the village of Ulan; approximately 38 kilometres north-northeast of Mudgee and 19 kilometres northeast of Gulgong (see Figure 1). UCMPL is a joint venture, managed by Glencore Coal Assets Australia.

UCMPL received Project Approval 08_0184 (PA 08_0184) from the Department of Planning, Industry and Environment (DPIE, formerly NSW Department of Planning & Environment) DPIE on the 15 November 2010 for continued operations. PA 08_0184 covers current and proposed mining of the Ulan Complex for the next 21 years, and production of up to 20 Mtpa (million tonnes per annum) of product coal. It incorporates both underground and open cut mining operations undertaken 24 hours a day, seven (7) days per week. The existing and proposed underground and open cut mining activities and land holdings, including the Bobadeen Irrigation Scheme and Bobadeen Basalt Quarry, as a collective, are referred to within as the Ulan Complex (see Figure 2).

On 7 December 2011 PA 08_0184 was modified (MOD 1) to incorporate the operations as described in the Environmental Assessment titled Ulan Coal Continued Operations North 1 Underground Mining Area, Minor Modification to Ulan No.3 & Ulan West Mine Plans & Proposed Concrete Batching Plant (Umwelt, 2011). The Notice of Modification for MOD 1 of PA 08_0184 was subsequently upheld by the Land and Environment Court final orders, issued on 5 April 2012. A second modification to PA 08_0184 (MOD 2) relating to changes to the Ulan West Mine Plan and Construction Blasting (Umwelt, 2012) was approved on 29 May 2012. A third modification to PA 08_0184 relating to the Environmental Assessment: Ulan West Modification (southern extension) (Umwelt 2015) – (MOD 3) was approved 14 March 2016. A fourth modification relating to the Environmental Assessment: Ulan Continued Operations Project, Longwall Optimisation Project (Eco Logical 2018) - (MOD 4) was approved on 17 July 2019. A fifth modification (MOD5) was approved 7th August 2020, for the revision of Ulan West Operational Mine Plan.

To comply with PA 08_0184¹, UCMPL are required to prepare and implement a *Noise Management Plan* (NMP) for the project. This NMP has been developed in accordance with the conditions of consent specified in **Table 1**. The table summarises the requirements of UCMPL's various development consent conditions and the section of the NMP where the consent condition has been addressed.

1.1.1

Ulan Village

As mentioned, the Ulan Village is the nearest rural community to the Ulan Complex (see Figure 1). In recent times, the Ulan Village has seen a major change in land ownership with the Moolarben Coal Mine (MCM) undertaking an active acquisition program in relation to private residences. At present, there is only one privately owned residence within the Ulan Village (see Figure 4). There are a further two (2) vacant private properties within the village owned by the same landholder. An active primary school, two (2) churches (no longer in use), a hotel and a Rural Fire Service fire shed (no longer in use) remain in the village of Ulan. Although the community structure of the Ulan Village has changed over time, the focus and commitment by UCMPL to achieve the objectives of this NMP remain unchanged. Small rural residential clusters are also located to the west and north east of the Project Boundary (Figure 1).

1.2 Purpose

The purpose of the NMP is to:

- To address potential noise issues from Ulan Complex to the surrounding area;

¹ Project Approval 08_0184, Schedule 3, Condition 9.

- To provide UCMPL employees and contractors with a clear and concise description of their responsibilities, regarding noise management at the Ulan Complex;
- Identify and control point source noise from the Ulan Complex;
- Establish a framework for minimising the noise footprint of the Ulan Complex;
- Detail control measures to mitigate the impacts associated with noise at the Ulan Complex;
- Outline the monitoring and measurement protocols for noise
- Address the relevant Conditions of PA 08_0184;
- Comply with the relevant sections of UCMPL's *Environment Protection Licence 394* (EPL 394);
- Address the relevant Statement of Commitments made within the Ulan Coal Continued Operations Environmental Assessment ;
- Support UCMPL's *Environmental Management Strategy(EMS)*²;
- Address key risks identified in *Ulan Complex's Risk Register*³, and details the necessary mitigation and management measures;
- Detail the review and reporting protocols;
- Address legislative requirements and guidelines relevant to the NMP; and
- Align UCMPL's operating philosophy with the *Glencore Corporate Practice* (GCP) and other corporate requirements.

1.3 Scope

The scope of the plan applies to the Ulan Complex existing and future operations and within land owned or managed by UCMPL (see **Figure 3**). Environmental management is the responsibility of all employees and contractors at the Ulan Complex. The plan applies to UCMPL management, employees and contractors.

The scope of the NMP applies to all activities undertaken by UCMPL regarding existing and future operations and projects within the Colliery Holding boundary and within land owned or under the control of UCMPL (see **Figure 4**).

² ULNCX-111515275-870 Environmental Management Strategy.

³ ULNCX-111515275-870 Environmental Management Strategy, Appendix B.

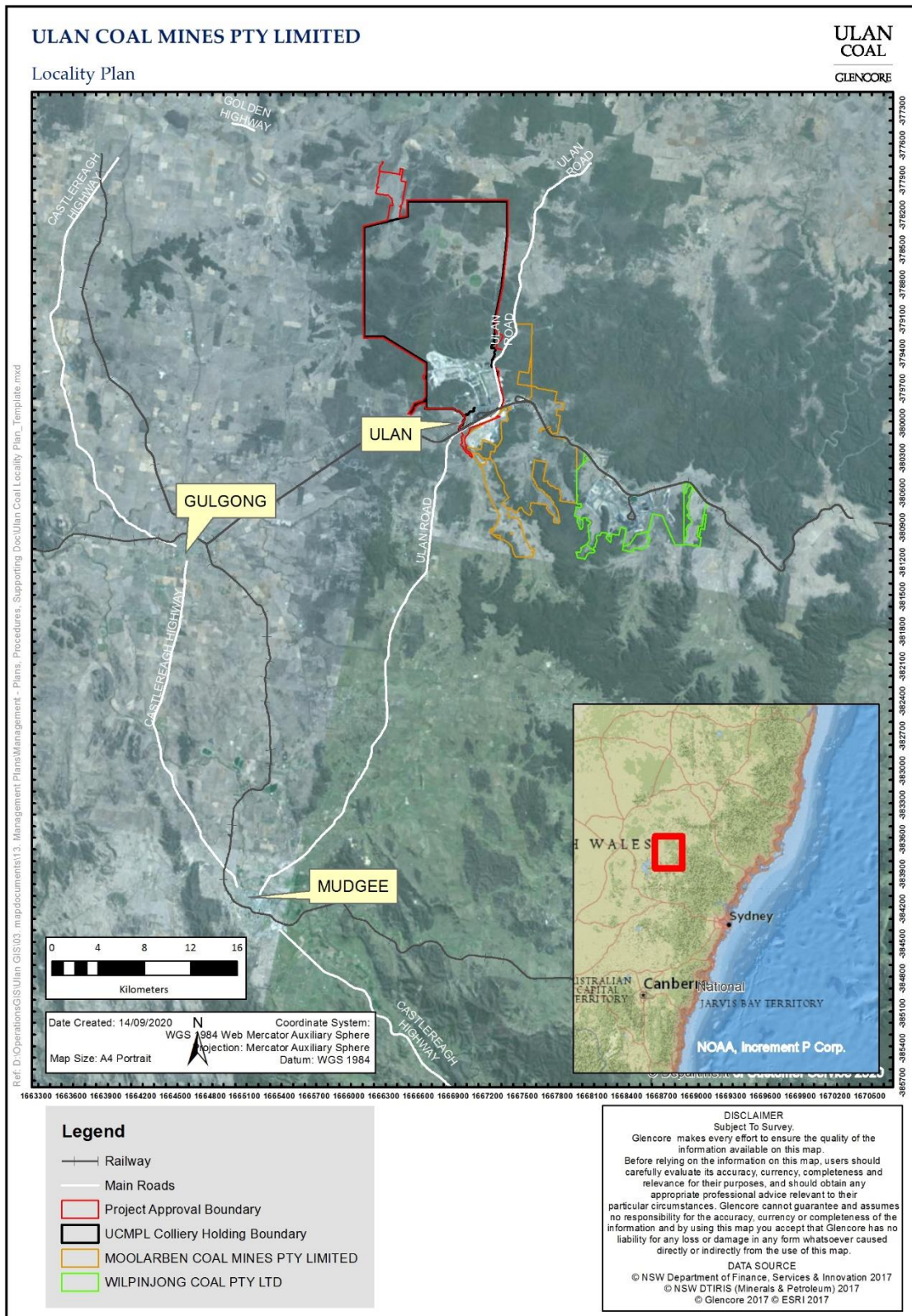


Figure 1 Location of the Ulan Complex

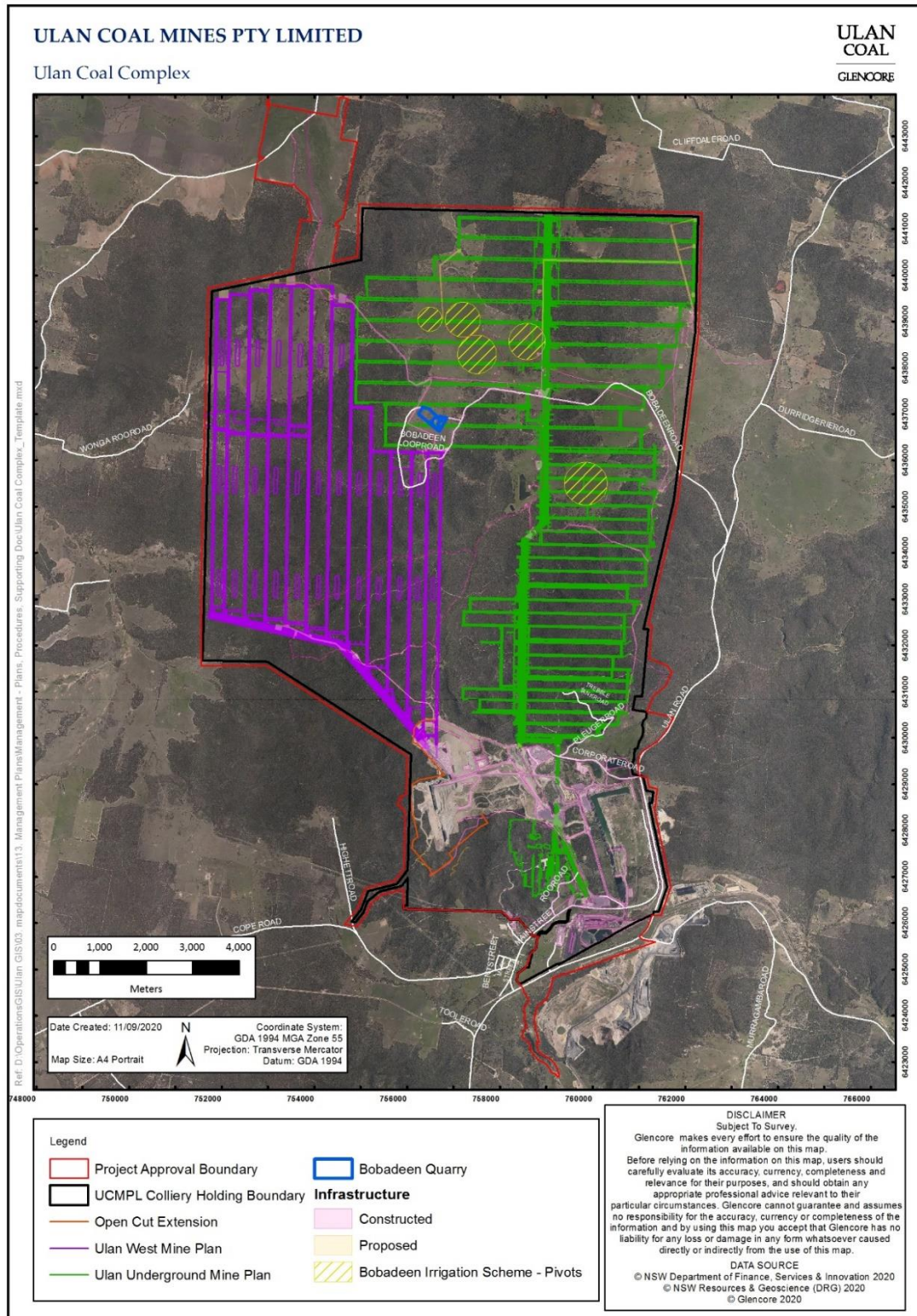


Figure 2 Ulan Coal Continued Operations

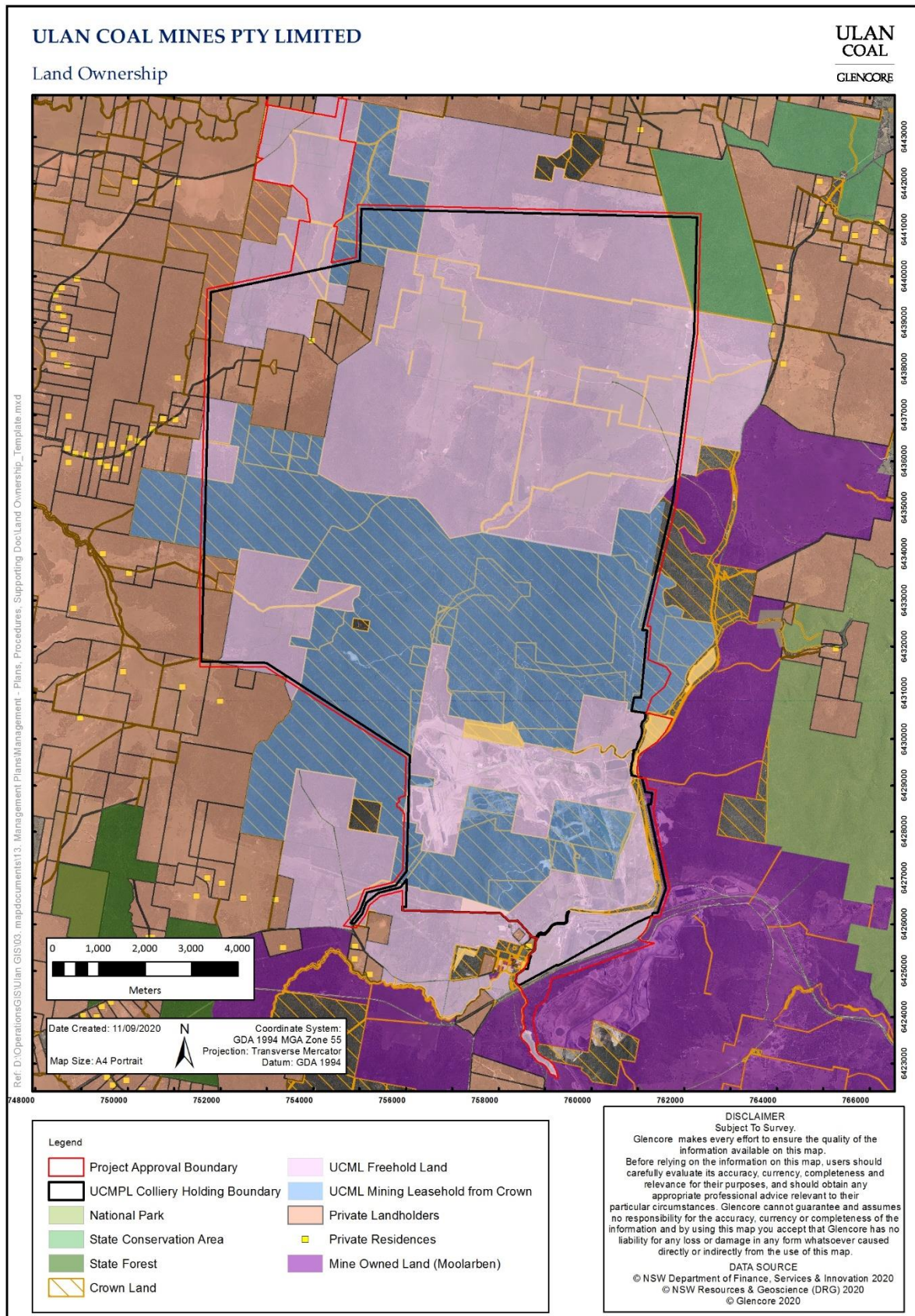


Figure 3 Land Ownership

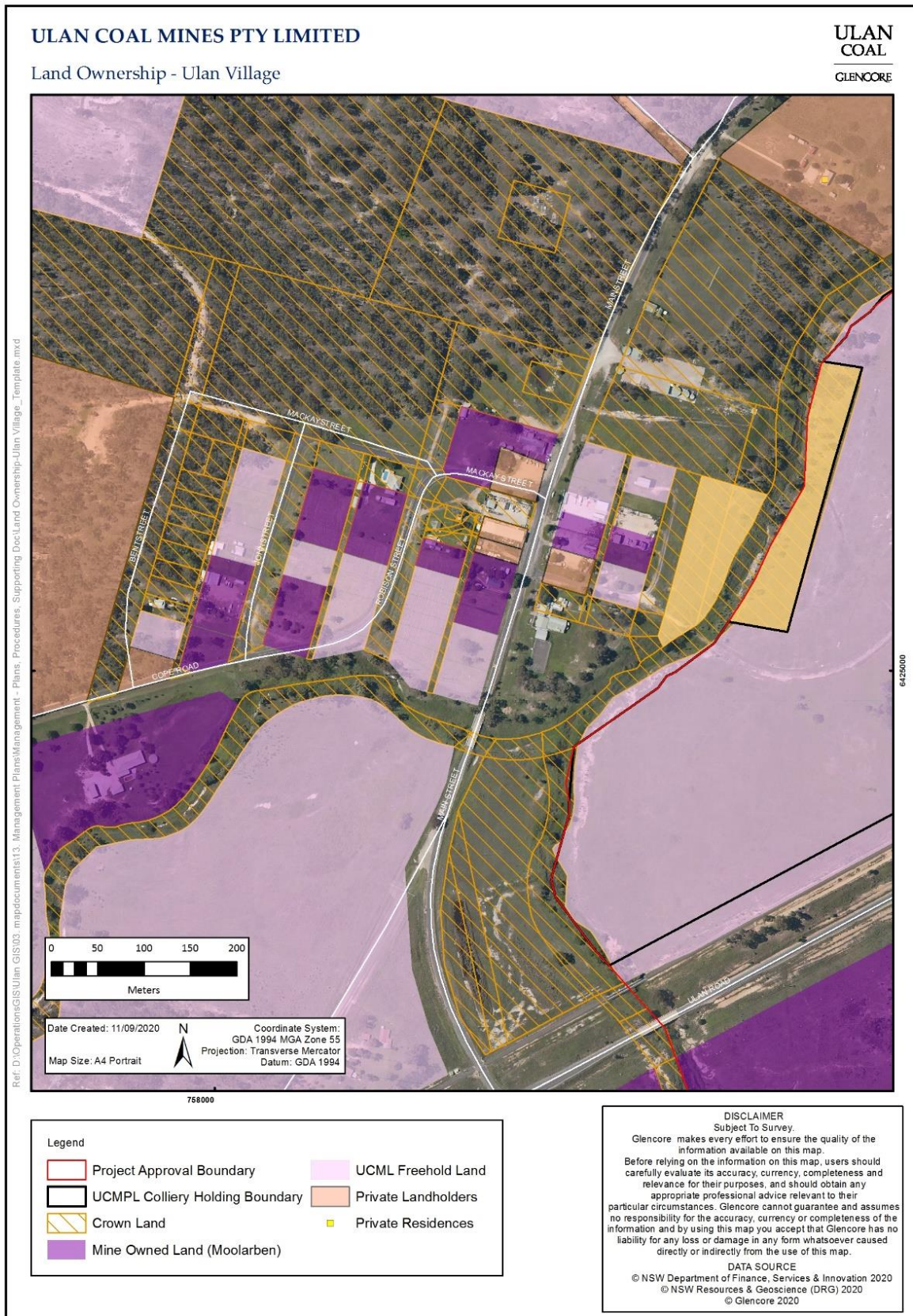


Figure 4 Land Ownership (Ulan Village)

2 Planning

2.1 Project Approval Requirements

Relevant conditions from the PA 08_0184 and where the conditions are addressed in this document are listed in **Table 2.1** below.

Table 2-1 – Project Approval Conditions(08_0184)

Condition	Requirement	Section of this document																																		
1 (Schedule 3)	<p>Acquisition Upon Request Upon receiving a written request for acquisition from an owner of the land listed in Table 1, the Proponent shall acquire the land in accordance with the procedures in Conditions 6 - 7 of Schedule 4. Table 1; Land subject to acquisition upon request</p> <table border="1"> <thead> <tr> <th>Noise</th> <th>Subsidence</th> </tr> </thead> <tbody> <tr> <td>93 – Rostherine Pty Ltd</td> <td>80 – “Broken back”</td> </tr> <tr> <td>274 – North-Eastern Wiradjuri Community Fund Ltd</td> <td></td> </tr> </tbody> </table> <p>The acquisition requirements in this condition do not apply to any of the land in the first column of Table 1 if it is subsequently rezoned for industrial development.</p>	Noise	Subsidence	93 – Rostherine Pty Ltd	80 – “Broken back”	274 – North-Eastern Wiradjuri Community Fund Ltd		Section 3.1.1																												
Noise	Subsidence																																			
93 – Rostherine Pty Ltd	80 – “Broken back”																																			
274 – North-Eastern Wiradjuri Community Fund Ltd																																				
2 (Schedule 3)	<p>Noise Criteria Except for the noise-affected land referred to in Table 1, the Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land or on more than 25 percent of any privately-owned land. <i>Table 2: Noise Criteria dB(A)</i></p> <table border="1"> <thead> <tr> <th rowspan="2">Location</th> <th>Day</th> <th>Evening</th> <th colspan="2">Night</th> </tr> <tr> <th>L_{Aeq} (15 min)</th> <th>L_{Aeq} (15 min)</th> <th>L_{Aeq} (15 min)</th> <th>L_{A1} (1 min)</th> </tr> </thead> <tbody> <tr> <td>254</td> <td>38</td> <td>38</td> <td>37</td> <td>45</td> </tr> <tr> <td>57</td> <td>37</td> <td>37</td> <td>36</td> <td>45</td> </tr> <tr> <td>7</td> <td>36</td> <td>36</td> <td>36</td> <td>45</td> </tr> <tr> <td>All privately-owned land</td> <td>35</td> <td>35</td> <td>35</td> <td>45</td> </tr> <tr> <td>Ulan Public School</td> <td colspan="3">35 (internal) When in use</td> <td>-</td> </tr> </tbody> </table> <p><i>Notes:</i></p>	Location	Day	Evening	Night		L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)	254	38	38	37	45	57	37	37	36	45	7	36	36	36	45	All privately-owned land	35	35	35	45	Ulan Public School	35 (internal) When in use			-	Section 3.1.2
Location	Day		Evening	Night																																
	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)																																
254	38	38	37	45																																
57	37	37	36	45																																
7	36	36	36	45																																
All privately-owned land	35	35	35	45																																
Ulan Public School	35 (internal) When in use			-																																

Condition	Requirement	Section of this document																			
	<p>☐ <i>Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.</i>⁴</p> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.</p>																				
2A (Schedule 3)	<p>The Proponent must ensure that noise generated during the construction of surface infrastructure construction activities as outlined in Modification 4 does not exceed the limits shown in Table 2A.</p> <p><i>Table 2A: Noise criteria dB(A)</i></p> <p><i>Table 2A: Noise criteria dB(A)</i></p> <table border="1"> <thead> <tr> <th rowspan="2">Location*</th> <th>Day</th> <th>Evening</th> <th colspan="2">Night</th> </tr> <tr> <th>L_{Aeq}(15 min)</th> <th>L_{Aeq}(15 min)</th> <th>L_{Aeq}(15 min)</th> <th>L_{A1} (1 min)</th> </tr> </thead> <tbody> <tr> <td>R39 and R40</td> <td>41</td> <td>38</td> <td>38</td> <td>52</td> </tr> <tr> <td>All other privately-owned land</td> <td>40</td> <td>35</td> <td>35</td> <td>52</td> </tr> </tbody> </table> <p><i>*To identify the locations R39 and R40 see the figure in Appendix 3.</i></p> <p>The Proponent must ensure that noise generated during the construction of surface infrastructure construction activities as outlined in Modification 4 does not exceed the limits shown in Table 2A.</p> <p><i>Table 2A: Noise criteria dB(A)</i></p>	Location*	Day	Evening	Night		L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)	R39 and R40	41	38	38	52	All other privately-owned land	40	35	35	52	
Location*	Day		Evening	Night																	
	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)																	
R39 and R40	41	38	38	52																	
All other privately-owned land	40	35	35	52																	
3 (Schedule 3)	<p>Noise Acquisition Criteria</p> <p>If the noise generated by the project exceeds the criteria in Table 3 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition from the landowner, the Proponent shall acquire the land in accordance with the procedures in Conditions 6 - 7 of Schedule 4</p> <p><i>Table 3: Noise Acquisition Criteria.</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day</th> <th>Evening</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>Privately-owned land</td> <td>40</td> <td>40</td> <td>40</td> </tr> </tbody> </table> <p><i>Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.</i></p> <p><i>For this condition to apply, the exceedances of the criteria must be systemic.</i></p>	Location	Day	Evening	Night	Privately-owned land	40	40	40	Section 3.1.3											
Location	Day	Evening	Night																		
Privately-owned land	40	40	40																		
4 (Schedule 3)	<p>Cumulative Noise Criteria</p> <p>Except for the noise-affected land referred to in Table 1, the Proponent shall implement all reasonable and feasible measures to ensure that the noise generated by the project combined with the noise generated by other mines in the area does not exceed the criteria in Table 4 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.</p> <p><i>Table 4: Cumulative noise criteria dB(A) L_{Aeq} (period)</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Day</th> <th>Evening</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>Privately-owned land</td> <td>50</td> <td>45</td> <td>40</td> </tr> </tbody> </table>	Location	Day	Evening	Night	Privately-owned land	50	45	40	Section 3.1.4											
Location	Day	Evening	Night																		
Privately-owned land	50	45	40																		

⁴The *Noise Policy for Industry (2017)* has superseded the *NSW Industrial Noise Policy*, and will be referenced where appropriate.

Condition	Requirement	Section of this document								
	<i>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.</i>									
5 (Schedule 3)	<p>Cumulative Noise Acquisition Criteria</p> <p>If the noise generated by the project combined with the noise generated by other mines in the area exceeds the criteria in Table 5 at any residence on privately-owned land or on more than 25 percent of any privately-owned land, then upon receiving a written request for acquisition 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 6-7 of Schedule 4.</p> <p><i>Table 4: Cumulative noise criteria dB(A) L_{Aeq} (period)</i></p> <table border="1"> <thead> <tr> <th></th> <th>Day</th> <th>Evening</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>privately-owned land</td> <td>55</td> <td>50</td> <td>45</td> </tr> </tbody> </table> <p>Note:</p> <ul style="list-style-type: none"> Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy; and For this condition to apply, the exceedances of the criteria must be systemic. 		Day	Evening	Night	privately-owned land	55	50	45	Section 3.1.5
	Day	Evening	Night							
privately-owned land	55	50	45							
6 (Schedule 3)	<p>Additional Noise Mitigation Measures</p> <p>Upon receiving a written request from the owner of any residence:</p> <p>(a) on the land listed in Tables 1 or 6; or</p> <p>(b) on privately-owned land where subsequent noise monitoring shows that the noise generated by the project is greater than or equal to L_{Aeq} (15 minute) 38 dB(A) on a systemic basis, the Proponent shall implement additional noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible.</p> <p>If within 3 months of receiving this request from the owner, the Proponent and the owner 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 Secretary for resolution.</p> <p><i>Table 6: Land where additional noise mitigation is available at the residence upon request</i></p> <table border="1"> <thead> <tr> <th>Location</th> <th>Receiver</th> </tr> </thead> <tbody> <tr> <td>254</td> <td>Geoffrey Mitchell and Mary Mitchell</td> </tr> </tbody> </table> <p>Note: To identify the locations referred to in Table 6, see the figure in Appendix 3.</p>	Location	Receiver	254	Geoffrey Mitchell and Mary Mitchell	Section 3.3				
Location	Receiver									
254	Geoffrey Mitchell and Mary Mitchell									
7 (Schedule 3)	<p>Rail Noise</p> <p>UCMPL shall seek to ensure that its rail spur is only accessed by locomotives that are approved to operate on the NSW rail network in accordance with noise limits L6.1 to L6.4 in RailCorp's EPL (No. 12208) and ARTC's EPL (No. 3142) or a Pollution Control Approval issued under the former <i>Pollution Control Act 1970</i>.</p>	Section 3.2								
8	Operating Conditions									

Condition	Requirement	Section of this document
(Schedule 3)	<p>UCMPL shall:</p> <ul style="list-style-type: none"> (a) implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the operational, low frequency, rail, and road traffic noise generated by the project; (b) regularly assess the real-time noise monitoring and meteorological forecasting data and relocate, modify, and/or stop operations on site to ensure compliance with the relevant conditions of this approval; and (c) co-ordinate the noise management on site with the noise management at Moolarben and Wilpinjong mines to minimise the cumulative noise impacts of the mines, to the satisfaction of the Secretary. 	<p>Section 3.2</p> <p>Sections 4.1.2,</p> <p>Sections 3.1.4, 3.1.5,4.1.3</p>
9 (Schedule 3)	<p>Noise Management Plan</p> <p>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> (a) be prepared in consultation with EPA and Council, and submitted to the Secretary for approval within 3 months of the date of final Orders being made by the Land and Environment Court in proceedings No. 10998 of 2010; (b) describe the noise mitigation measures that would be implemented to ensure compliance with conditions 2-8 of this schedule, including a real-time noise management system that employs both reactive and proactive mitigation measures; (c) include a noise monitoring program that: <ul style="list-style-type: none"> • uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the project; and • includes a protocol for determining exceedances of the relevant conditions of this approval; (d) include a protocol that has been prepared in consultation with the owners of the Moolarben and Wilpinjong mines for minimising and managing the cumulative noise impacts of the mines. <p><i>Note: The effectiveness of the Noise Management Plan is to be reviewed and audited in accordance with the requirements in Schedule 5. Following these reviews and audits, the plan is to be revised to ensure it remains up to date (see Condition 4 of Schedule 5).</i></p>	<p>Section 2.3 & Appendix 1</p> <p>Sections 3.2, 3.3</p> <p>Sections 4.1.2, 4.2, 4.3</p> <p>Section 4.1.3</p> <p>Sections 4.2, 5</p>
23 (Schedule 3)	<p>Meteorological Monitoring</p> <p>During the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that:</p> <ul style="list-style-type: none"> (a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and <p>is capable of continuous real-time measurement of temperature lapse rate in accordance with the <i>NSW Industrial Noise Policy</i>.</p>	<p>Section 4.1.2</p>
6 (Schedule 4)	<p>Land Acquisition</p> <p>Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent will make a binding written offer to the landowner based on:</p> <ul style="list-style-type: none"> (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the project, having regard to the existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and presence of improvements on the land and/or any approved building or structure which has been physically commenced on the land 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 	<p>Section 3.1.1 & Error! Reference source not found.</p>

Condition	Requirement	Section of this document
	<p>resulted from the implementation of any additional noise mitigation measures under Condition 6 of Schedule 3;</p> <p>(b) the reasonable costs associated with:</p> <ul style="list-style-type: none"> • relocating within the Mid-Western Regional local government area, or to any other local government area determined by the Secretary; 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 <p>(c) reasonable compensation for any disturbance caused by the land acquisition process. 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 Secretary for resolution.</p> <p>Upon receiving such a request, the Secretary will 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 must 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 Secretary 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 Secretary will 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, the detailed report disputing the independent valuer's determination, and any other relevant submissions.</p> <p>Within 14 days of this determination, the Proponent must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary'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 Secretary determines otherwise.</p>	
<p>7 (Schedule 4)</p>	<p>The Proponent must pay all reasonable costs associated with the land acquisition process described in Condition 6 above, including the costs associated with obtaining Council approval for any plan subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.</p>	<p>Section 3.1.1 & Error! Reference source not found.</p>
<p>6.2.1 (Appendix 9)</p>	<p>Mining and associated activities for the Project may be undertaken 24 hours a day, seven days a week.</p>	<p>Section 1.1</p>

Condition	Requirement	Section of this document
6.2.2 (Appendix 9)	Construction will generally be undertaken between 7.00 am and 7.00 pm daily. Construction activities may occur outside these hours when UCMPL is satisfied that such activities are inaudible at nearest private residences.	Section 3.2
6.10.1 (Appendix 9)	UCMPL will implement all reasonable and feasible measure to minimise the noise impact from the Project at residences.	Section 3.2
6.10.4 (Appendix 9)	UCMPL is committed to ameliorating any low frequency noise issues due to the Project in accordance with best practice guidelines and management practices, when the issue is identified	Section 3.2.1
6.10.5 (Appendix 9)	Minor blasts such as that associated with small scale construction projects i.e. construction of ventilation shafts will not be limited in terms of frequency or require monitoring where UCMPL confirms by design and prediction prior to blasting that the overpressure and vibration levels will be less than 95dBL and 1 mm/sec at all private buildings or structures.	Section 3.2

2.2 Environment Protection Licence Requirements

Environmental Protection Licence 394 (EPL 394) condition P1.4 provides monitoring points for the purposes of weather and/or noise monitoring and/or setting of limits for the emission of noise from the premises. The monitoring points are listed below.

EPA identification no.	Type of monitoring point	Location Description
24	Noise monitoring	Lot 27 DP 750735 – monitoring location NM7
25	Noise monitoring	Lot 1 DP 876943 – Monitoring location NM8
26	Noise monitoring	Lot 1 Section 2 DP 759017 – Ulan Public School
34	Air blast overpressure & ground vibration peak particle velocity monitoring	Lot 1 Section 2 DP 759017 – Ulan Public School
35	Air blast overpressure & ground vibration peak particle velocity monitoring	Lot 27 DP 750735 – Monitoring location NM7
36	Noise monitoring	Lot 12; DP 734934
37	Noise monitoring	Lot 11; DP 734934
38	Noise monitoring	All privately owned land
39	Noise monitoring	All privately owned land during construction of facilities associated with 08_0184 MOD 4.

Condition L5.1 requires that noise generated at the premises that is measured at each monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.

POINT 24

Time period	Measurement parameter	Measurement Frequency	Noise level dB(A)
Day	LAeq (15 minute)	-	38
Evening	LAeq (15 minute)	-	38
Night	LAeq (15 minute)	-	37

POINT 24, 25

Time period	Measurement parameter	Measurement Frequency	Noise level dB(A)
Night	LA1	-	45

POINT 25

Time period	Measurement parameter	Measurement Frequency	Noise level dB(A)
Day	LAeq (15 minute)	-	37
Evening	LAeq (15 minute)	-	37
Night	LAeq (15 minute)	-	36

POINT 26

Time period	Measurement parameter	Measurement Frequency	Noise level dB(A)
Day	LAeq (15 minute)	-	35
Evening	LAeq (15 minute)	-	35

POINT 36, 37

Time period	Measurement parameter	Measurement Frequency	Noise level dB(A)
Day	LAeq (15 minute)	-	41
Evening	LAeq (15 minute)	-	38
Night	LAeq (15 minute)	-	38
Night	LA1	-	52

POINT 38

Time period	Measurement parameter	Measurement Frequency	Noise level dB(A)
Day	LAeq (15 minute)	-	35

Evening	LAeq (15 minute)	-	35
Night	LAeq (15 minute)	-	35
Night	LA1	-	45

POINT 39

Time period	Measurement parameter	Measurement Frequency	Noise level dB(A)
Day	LAeq (15 minute)	-	40
Evening	LAeq (15 minute)	-	35
Night	LAeq (15 minute)	-	35
Night	LA1	-	52

Note: 1. the above noise limits do not apply at properties where the licensee has a written agreement with the landowner to exceed the noise limits.

2. The noise limits for licence point 26 identified in condition L5.1 are applicable when in use only and when measured internally.

3. The noise limits for licence points 36, 37 and 39 apply only during the construction of surface infrastructure allowable under Project Approval 08_0184 MOD 4.

L5.2	<p>For the purpose of Condition L5.1:</p> <p>a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays;</p> <p>b) Evening is defined as the period from 6pm to 10pm; and</p> <p>c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays</p>
L5.3	<p>The noise limits set out in condition L5.1 apply under all meteorological conditions except for the following:</p> <p>a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or</p> <p>b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or</p> <p>c) Stability category G temperature inversion conditions.</p>
L5.4	<p>For the purpose of condition L5.3:</p> <p>a) Data recorded by the meteorological station identified as EPA Licence Point 32 must be used to determine meteorological conditions; and</p> <p>b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.</p>
L5.5	<p>To determine compliance:</p> <p>a) with the Leq(15 minute) noise limits in condition L5.1, the noise measurement equipment must be located:</p>

	<p>i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or</p> <p>ii) within 30 metres of a dwelling façade, but not closer than 3 metres where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable</p> <p>iii) within approximately 50 metres of the boundary of a National Park or Nature Reserve</p> <p>b) with the LA1(1 minute) noise limits in condition L5.1, the noise measurement equipment must be located within 1 metre of a dwelling façade.</p> <p>c) with the noise limits in condition L5.1, the noise measurement equipment must be located:</p> <p>i) at the most affected point at a location where there is no dwelling at the location; or</p> <p>ii) at the most affected point within an area at a location prescribed by conditions L5.5(a) or L5.5(b).</p>
L5.6	<p>A non-compliance of L5.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured:</p> <p>(a) at a location other than an area prescribed by condition L5.5(a) and L5.5(b); and/or</p> <p>(b) at a point other than the most affected point at a location.</p>
L5.7	<p>For the purposes of determining the noise generated at the premises the modification factors in Fact Sheet C of the Noise Policy for Industry (NSW EPA, 2017) must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.</p>

2.3 Legislative Requirements

2.3.1 Key Legislation

The key pieces of legislation relevant to this NMP are as follows:

- Potential noise and vibration impacts generated by the Ulan Complex were modelled during the preparation of the *Ulan Coal Continued Operations Environmental Assessment 2009* (EA). The results from the modelling were assessed under the *Environmental Planning and Assessment Act 1979* (EP&A Act) and Regulations.; and
- The Ulan Complex is a 'scheduled activity' as determined *Protection of the Environment Operations Act 1997* (NSW) (POEO Act)⁵ and therefore requires an EPL under the POEO Act. EPL 394 requires all activities to be carried out in a competent manner and all plant and equipment must be properly maintained.

2.4.1

2.4 Consultation

Government Departments

In accordance with PA08_0184⁶, consultation was undertaken with the Environment Protection Agency (EPA) and (MWRC) during the preparation of the NMP. Both EPA and MWRC were sent draft copies of this management plan, prior to finalising the NMP. UCMPL received a response from the EPA on 25 March 2011. A second letter was sent to MWRC on 16 June 2011, requesting feedback on the management plan. A response was received from MWRC on 23 June 2011 advising that MWRC had no comment in relation to this management plan.

Comments provided by DPIE are addressed in sections indicated in **Table 2-2**.

Revisions will be submitted for approval by the DPIE. The review process will be conducted in accordance with the requirements of relevant government agencies. Revision History is available in **Section 7.4**.

⁵ Schedule 3.

⁶ Project Approval 08_0184, Schedule 3, Condition 9(a).

Table 2-2 – Draft Noise Management Plan feedback from DPIE

	Department Issues	Where addressed
DPIE 2011 Review of Draft Noise Management Plan	Condition 9 (d) requires the NMP to include a protocol for consultation with Moolarben and Wilpinjong for minimising cumulative noise impacts. This is not included in the plan (Section 2.52 refer to Section 4.7 which does not include the protocol).	Section 2.4.2
	Section 3.3 – note incomplete information following first para and dot points.	Section 3.3
	Section 4.1 – need to specify how often the results from the NMP will be reviewed.	Section 4.1
	Figure 4.1 – it would be useful to include the Residence Numbers on the Figure (as indicated in the text of the plan and the EA);	Figure 4.1
DPIE 2014 Review of Noise Management Plan	Update to meet requirements of Draft Noise Application Note and DPE recommendations	Section 4
DPIE 2019 Review of Noise Management Plan	More detailed information has been provided for the real time and attended noise monitoring requirements to address the conditions.	Section 4.1
	The plan refers to both non-compliance and non-conformance. This should be changed to non-compliance, to reflect the definitions in the Conditions of Consent and in accordance with the new auditing and compliance reporting guidelines	Section 4

2.4.2

Neighbouring Mining Operations

In accordance with PA08_0184⁷, a data sharing agreement has been implemented between UCMPL, Moolarben Coal Mine (MCM) and Wilpinjong Coal Mine (WCM) to assist with management of the cumulative effects of noise impacts. Discussions with neighbouring mining operations indicated the objectives of the noise protocol would be to; improve management of cumulative impacts by establishing an integrated monitoring network (to provide information); an alarming system (to capture potential impacts); and agreeing a communication strategy (to respond to impacts).

A monitoring site was identified and set up at a mine owned location which receives noise from UCMPL and MCM, and is used as a trial to share information and provide a trigger for response capability. UCMPL will respond to noise alarms (set to notify when directional monitoring indicates UCMPL as the source) in accordance with its existing noise response procedures.

2.4.3

Formal data sharing arrangements with both neighbouring mining operations have been developed and implemented. These arrangements enable sharing of real-time and attended noise monitoring data and reports in response to requests from both mines and in the interests of sharing data to assist in the management of noise from all three operations.

If noise from Ulan Complex exceeds the project specific or cumulative noise criteria, UCMPL will manage these exceedances in accordance with **Section 4.3** of this plan and **Section 4** of the *EMS*⁸.

Existing Noise Environment

The existing ambient noise environment around the Ulan Complex has been monitored on many occasions in the past. The following sites have been monitored previously: 1, 4, 7, 6, 10, 13, 28, 30, western boundary, eastern boundary and Ulan Village. The noise monitoring can be separated into two areas Ulan Village and the remaining rural residential areas. Table 2-3 shows a summary of the

⁷ Project Approval 08_0184, Schedule 3, Condition 9(d).

⁸ ULNCX-111515275-870 Environmental Management Strategy.

background noise levels based on all previous measurements. These are expressed in terms of the Rating Background Levels (RBL), a standard measure of background noise which is used in the NSW Government's INP.

Table 2-3 – Measured Existing Noise Levels dB(A)

Location	Rating Background Levels (RBLs)		
	Day (7am-6pm)	Evening (6pm-10pm)	Night (10pm-7am)
Ulan Village	39	39	42
Rural Residential Areas	30	30	30

At the Ulan Village, the existing noise levels for day, evening and night-time are quite high – ranging between 39-42dB(A). By comparison, the background noise levels at the rural residential locations away from the mine (i.e. not affected by mine noise) are typically 30dB(A) or less during the daytime, evening and night periods.

Analysis of directional noise monitoring results at Ulan Village confirms that the higher day, evening and night-time noise levels at the Ulan Village are due largely to noise from the mine, particularly the existing coal handling preparation plant (CHPP).

Noise monitoring at the other rural residential locations close to the mine typically show levels from the mine to be between 30dB(A) to 35dB(A) L_{Aeq} . High noise levels during the night time period are possible as a result of noise levels being enhanced due to extreme meteorological affects such as *G Class Pasquil* stability class temperature inversion conditions (refer to **Section** Error! Reference source not found.).

3 Implementation

During the preparation of the noise and impact assessment for the EA, the potential noise impacts associated with the all aspects of the Ulan Complex were from:

- Construction of the infrastructure;
- Mining and rehabilitation activities;
- Blasting (the procedural requirements for blast noise and vibration management are addressed in the Blast Management Plan⁹; and
- Transport activities.

Section 3.1 identifies the project specific criteria for noise applicable to the Ulan Complex as identified in of PA08_0184¹⁰. To assess and determine compliance against the project specific criteria for the Ulan Complex, UCMPL have developed a Noise Monitoring Program. The details of the Noise Monitoring Program are outlined in **Section 4** of this NMP.

The process for managing noise emissions from the Ulan Complex to support compliance, whilst facilitating industry best practice, reactive, and proactive noise management methods, are outlined within **Section 3.2** and **Section 4.2** of this management plan.

⁹ ULNCX-111515275-1953 Blast Management Plan.
¹⁰ Project Approval 08_0184, Schedule 3, Condition 9.

3.1 Project Specific Criteria

Acquisition upon Request

Upon receiving a written request for acquisition from an owner of the land listed in **Table 3-1**, UCMP shall acquire the land in accordance with the procedures in of PA 08_0184¹¹. The acquisition requirements in this condition do not apply to the land in **Table 3-1** if it is subsequently rezoned for industrial development.

3.1.1

Table 3-1 –Land subject to acquisition upon request

Property
93 - Rosterine Pty Ltd ¹
274 - North-Eastern Wiradjuri Community Fund Ltd

Note: 1Receiver 93 rezoned for an industrial/commercial development. The new occupier of the site now operates a commercial wholesale business and therefore the Conditions 6 - 7 of Schedule 4 do not apply.

Noise Criteria

3.1.2

Except for the noise-affected land referred to in **Table 3-1**, UCMP shall ensure that the noise generated by the project does not exceed the criteria in **Table 3-2** at any residence on privately-owned land or on more than 25 per cent of any privately-owned land.

Table 3-2 –Noise Criteria dB(A)

Location	Day	Evening	Night	
	LAeq (15 min)	LAeq (15 min)	LAeq (15 min)	LA1 (1 min)
254	38	38	37	45
All privately-owned land	35	35	35	45
Ulan Public School	35 (internal) When in use			-

Notes: Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.⁷¹ Property purchased by UCMP in 2011. Property 57 purchased by UCMP in 2018.

3.1.3

In accordance with PA 08_0184¹², these criteria do not apply if UCMP has a written agreement with the relevant landowner to exceed the criteria, and UCMP has advised the DPIE in writing of the terms of this agreement. Additionally, if UCMP purchases any of the properties listed in **Table 3-2**, the criteria no longer applies.

Currently, UCMP does not have any written agreements with relevant landowners.

Construction Noise Criteria (MOD4 facilities)

The Proponent must ensure that noise generated during the construction of surface infrastructure construction activities as outlined in Modification 4 does not exceed the limits shown in Table 2A. Table 2A: Noise criteria dB(A)

Table 2A: Noise criteria dB(A)	Day	Evening	Night	
Location*				
LAeq(15 min)	LAeq(15 min)	LAeq(15 min)	LA1 (1 min)	
R39 and R40	41	38	38	52

¹¹ Project Approval 08_0184, Schedule 4, Conditions 6 – 7.

¹² Project Approval 08_0184, Schedule 3, Condition 2.

All other privately-owned land 40

35

35

52

Noise Acquisition Criteria

If the noise generated by the project exceeds the criteria in

Table 3-3 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 for acquisition from the landowner, UCMPL shall acquire the land in accordance with the procedures in PA 08_0184¹³.

No acquisitions for noise criteria exceedance have occurred.

3.1.4

Table 3-3 -- Noise acquisition criteria dB(A) LAeq (15min)

Location	Day	Evening	Night
All privately-owned land	40	40	40

Notes:

- Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.
- For this condition to apply, the exceedances of the criteria must be systemic.

Cumulative Noise Criteria

3.1.5

Except for the noise-affected land referred to in **Table 3-1** UCMPL shall implement all reasonable and feasible measures to ensure that the noise generated by the project combined with the noise generated by other mines in the area does not exceed the criteria in **Table 3-4** at any residence on privately-owned land or on more than 25 per cent of any privately-owned land. Further detail on the property acquisition process is included in **Section 3.5** of the EMS¹⁴.

Table 3-4 – Cumulative noise criteria dB(A) LAeq (period)

Location	Day	Evening	Night
All privately-owned land	50	45	40

3.1.6

Notes: Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.

Cumulative Noise Acquisition Criteria

If the noise generated by the project combined with the noise generated by other mines in the area exceeds the criteria in

Table 3-5 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 for acquisition from the landowner, UCMPL shall acquire the land on an equitable basis as possible with the relevant mines in accordance with the procedures in PA 08_0184¹⁵.

Table 3-5 – Cumulative noise land acquisition criteria dB(A) LAeq (period)

Location	Day	Evening	Night
All privately-owned land	55	50	45

¹³ Project Approval 08_0184, Schedule 4, Conditions 6 – 7.

¹⁴ ULNCX-111515275-870 Environmental Management Strategy.

¹⁵ Project Approval 08_0184, Schedule 4, Conditions 6-7.

Notes:

- Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy; and
- For this condition to apply, the exceedances of the criteria must be systemic.

3.2 Noise Management & Mitigation Measures

PA 08_0184 requires all feasible and reasonable noise mitigation measures to be applied in order to minimise noise emission to the general community. These measures include:

- Restricting movement of trucks on ridgelines and exposed haul routes where their noise can propagate over a wide area, especially at night.
- Scheduling the use of noisy equipment at the least sensitive time of day.
- Sitting noisy equipment behind structures that act as barriers, or at the greatest distance from the noise-sensitive area.
- Orienting equipment so that noise emissions are directed away from any sensitive areas to achieve the maximum attenuation of noise.
- Where there are several noisy pieces of equipment, scheduling operations so they are used separately rather than concurrently.
- Keeping equipment well maintained.
- Adjusting reversing alarms on heavy equipment to reduce noise, by limiting acoustic range to immediate danger area.
- Fitting new mobile plant with “squawker” type, non-tonal reversing alarms.
- Engineering controls including noise attenuation, where feasible on mobile and stationary equipment that is potentially generating significant noise
- Using equipment with efficient muffler design.
- Avoiding noise intensive operations during the night.
- Use of unattended real-time monitoring to assist in identifying when noise levels are rising so that proactive control can be implemented, as per **Section 4.2**.
- Construction will generally be undertaken between 7.00 am and 7.00 pm daily. Construction activities may occur outside these hours when UCMPL is satisfied that such activities are inaudible at nearest private residences.

3.2.1

In addition to the above measures, and in accordance with PA 08_0184¹⁶, UCMPL can confirm that the rail spur shall only be accessed by locomotives that are approved to operate on the NSW rail network in accordance with the noise limits L6.1 and L6.4 in RailCorp’s EPL (No. 12208) and ARTC’s EPL (No. 3142) or a Pollution Control Approval issued under the former *Pollution Control Act 1970*.

Low Frequency Noise

UCMPL is committed to ameliorating any low frequency noise issues if they arise, consistent with the most recent low frequency noise assessment process that has been developed overseas in lieu of the NSW Industrial Noise Policy (INP), such as:

- Proposed criteria for the assessment of low frequency noise disturbance, 2005, Prepared for Defra by Dr. Andy Moorhouse, Dr. David Waddington, Dr. Mags Adams; and
- Procedure for the assessment of low frequency noise complaints 2005, Prepared for Defra by Dr. Andy Moorhouse, Dr. David Waddington, Dr. Mags Adams.

¹⁶ Project Approval 08_0184, Schedule 3, Condition 7.

3.3 Implementation of Additional Noise Mitigation Measures

In accordance with PA 08_0184¹⁷, upon receiving a written request from the owner of any of the following residences:

- 254 - Geoffrey Mitchell & Mary Mitchell; or
- Privately-owned land (where subsequent noise monitoring shows that the noise generated by the project is greater than or equal to $L_{Aeq, 15min}$ 38 dB(A) on a systemic basis), where reasonable and feasible, additional noise mitigation measures (such as double glazing, insulation, and/or air conditioning) shall be implemented at the residence, in consultation with the owner;

If within 3 months of receiving this request from the owner, agreement cannot be reached 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 Secretary for resolution.

Further detail on the dispute resolution process is included in **Section 3.5** of the *EMS*¹⁸.

3.4 Training and Awareness

General awareness training is provided to new employees and contractors as part of the Ulan Site Specific Induction program.¹⁹ The induction is referenced in the *EMS Training Needs Analysis (TNA)*.²⁰ Employees receive refresher training, which includes noise management every three (3) years also required by the TNA.

Surface Operations Open Cut Examiners (OCEs) receive specific noise management training every three (3) years as required by the TNA.

4 Measurement and Evaluation

UCMPL has developed a Noise Monitoring Program in as required by PA 08_0184²¹. The purpose of the Noise Monitoring Program as undertaken by UCMPL is to:

- assess noise performance at the Ulan Complex against the project specific criteria for noise;
- ensure compliance by UCMPL with its other statutory requirements, including EPL 394;
- support the *EMS*;²²
- support the *Noise Management Plan*;²³
- support the *Noise Management Procedure*;²⁴ ;
- demonstrate continuous improvement;
- demonstrate due diligence;
- facilitate reactive and proactive noise management; and
- assess and review community complaints.

In accordance with **Section 2.4.2**, UCMPL's noise monitoring program will also be undertaken with consideration of the noise monitoring protocol established with the neighbouring mines.

¹⁷ Project Approval 08_0184, Schedule 3, Condition 6.

¹⁸ ULNCX-111515275-870 Environmental Management Strategy.

¹⁹ Ulan Surface Operations – ULNOC-1105874907-1747, Ulan No.3 Underground – ULNUG-849165555-5762, Ulan West – ULWUG-729531900-105.

²⁰ ULNCX-111515275-870 Environmental Management Strategy, Appendix C – Environmental and Community Training Needs Analysis.

²¹ Project Approval 08_0184, Schedule 3, Condition 9(c).

²² ULNCX-111515275-870 Environmental Management Strategy.

²³ ULNCX-111515275-232 Noise Management Plan.

²⁴ ULNCX-111515275-1938 Noise Management Procedure.

4.1 Noise Monitoring Program

Noise monitoring is to be performed in accordance with the requirements of PA 08_0184, the *NSW Industrial Noise Policy*, as well as the *Australian Standards* referenced in **Table 7-2**.

Figure 5 shows the locations of sensitive receptors to Ulan Complex and the type and location of noise monitoring to be undertaken. The Noise Monitoring Program includes a combination of attended (**Section 4.1.1**) and unattended real-time (**Section 4.1.2**) monitoring for evaluating compliance with the relevant noise criteria as detailed within **Section 3.1** of this NMP.

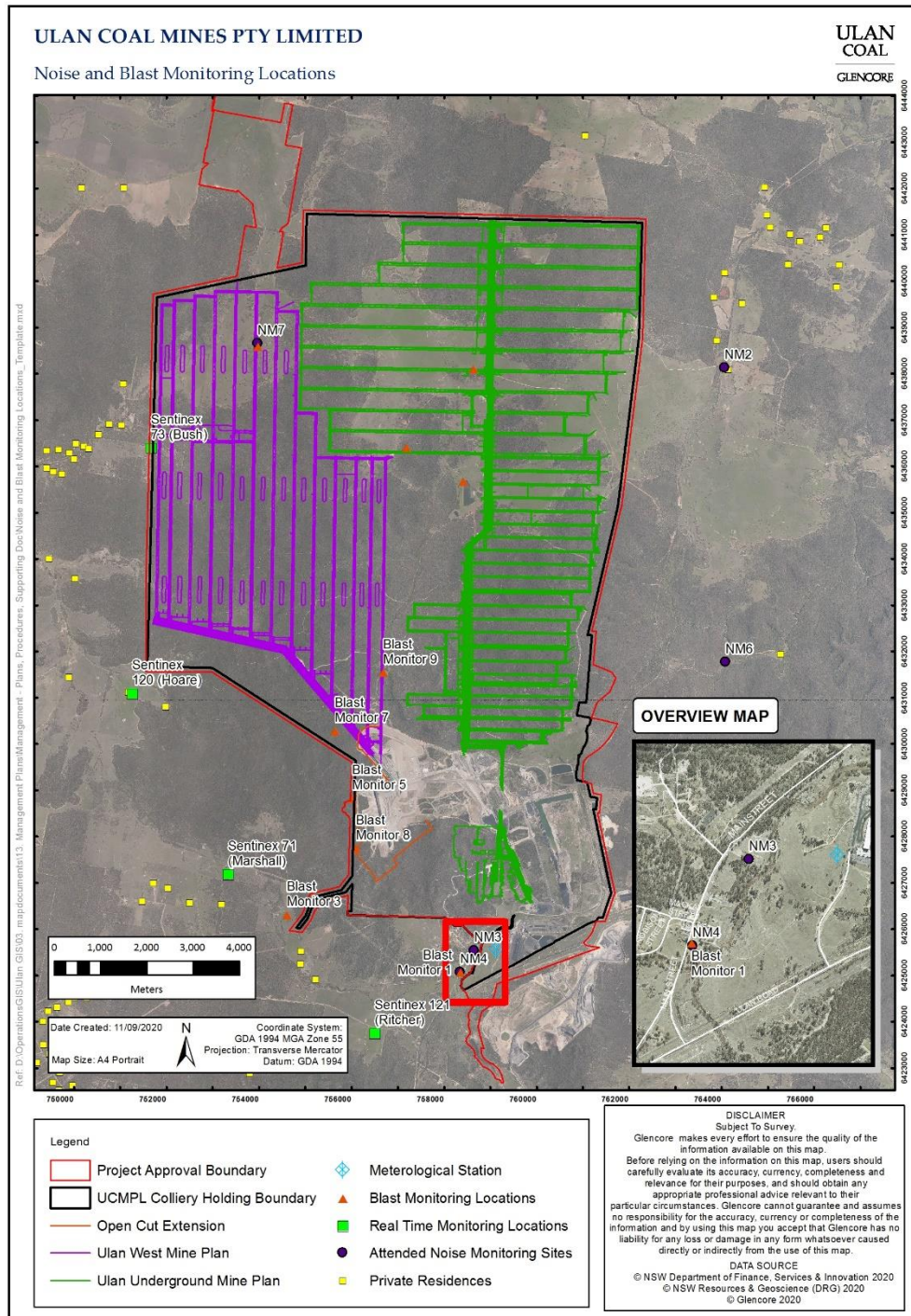


Figure 5 Noise Monitoring Locations

Attended Noise Monitoring

Attended noise monitoring is carried out twice every six (6) months on dates as close together as weather permits and is undertaken during the more critical evening and night-time periods, when noise criteria are at their most stringent and meteorological conditions are most likely favourable to noise dispersion.

Noise monitoring carried out at noise-sensitive locations will generally be carried out at 30 metres from the affected buildings subject to local access constraints. **Table 4-1** provides the locations of the attended noise monitoring (NM) sites:

4.1.1

Table 4-1 – Attended Noise Monitoring Sites (EPL 394 and PA08_0184)

Noise Monitoring Site	Eastings	Northings	Property ID	Location
NM2	764142	6438097	60	5500 Ulan Road
NM3	758658	6425529	274	Ulan Village
NM4	758354	6425063	Ulan School	Ulan Village
NM6	765276	6431949	1	Ulan Road
NM7	753971	6438598	254	2461 Blue Springs Road

Notes: NM1 was removed from the NMP due to the purchase of the property by UCMPL in May 2011. NM5 was removed from the NMP due to the purchase of the property by Moolarben Coal Mines (MCM) in November 2013. NM8 was removed from the NMP due to the purchase of the property by UCMPL in 2018.

Attended noise monitoring is carried out by an independent appropriately qualified noise specialist. Records of routine equipment calibration and testing, in accordance with manufacturers specifications, are maintained by the noise specialist undertaking the monitoring.

Details of site activity and equipment usage will be noted during attended noise monitoring events. Reports prepared by a noise specialist following each noise monitoring event will include the following information, but not limited to:

- The locations and results of noise monitoring;
- Tabulation of noise measurement results (including L_{Amax} , L_{A1} , L_{A10} , L_{A90} and L_{Aeq} noise levels) together with notes identifying the principal noise sources and operations;
- Summary of any measurements exceeding the noise criteria levels, and descriptions of the plant or operations causing these exceedances; and
- Details of corrective actions to address any noise criteria exceedances, and confirmation of its successful implementation. Where corrective action has not yet been implemented, it may be shown as pending, and the status of its implementation shall be carried forward to following reports.

Acoustic instrumentation employed in the noise monitoring surveys will comply with the requirements of AS 1259.2-1990 "Acoustics - Sound Level Meters. Part 2: Integrating -Averaging"²⁵ and carry appropriate National Association of Testing Authorities, Australia (NATA) or manufacturer calibration certificates.

In the event an attended measured noise level is found to exceed PA 08_0184 criteria and is attributable to the mine operation the following steps are to be taken, as per the *Draft Noise Monitoring Application Note*:

1. Noise specialist to record the reading, if measurement demonstrates that UCMPL has potential exceeded the criteria and proceed to Step 2.
2. Within 75 minutes of the first reading (and no earlier than 10pm) a second 15 minute measurement is to be taken. If this reading exceeds the criteria then proceed to Step 3 otherwise proceed to Step 4.

²⁵ As amended from time to time.

3. If the reading exceeds criteria and is attributable to the mine operation and taken in valid meteorological conditions then proceed to Step 5.
4. The noise specialist will record the result, note the site has passed, schedule an additional monitoring test to be undertaken at the site within 1 week, and move on to the next monitoring site.
5. The noise specialist will record the result, note the site has failed and is deemed a '*noise affected night*' at that site. An additional monitoring test should be scheduled to be undertaken at the site within 1 week, and move on to the next monitoring site.

Upon receipt of the results, any results that exceed the criteria, are attributable to the mine operation and taken in valid meteorological conditions shall be reported to DPE and EPA the following day along with action taken to reduce the noise. Results from night time monitoring that are deemed a '*noise affected night*' shall be reported to DPE, the EPA and the affected community as per the notification requirements in accordance with **Section 4.5**.

All results from the Noise Monitoring Program are kept in accordance with the EMS²⁶. Noise monitoring results that are required to be made publicly available by *EPL 394* are published on the Ulan Complex website at <http://www.ulancoal.com.au>.

In the event of unattended monitoring measurement demonstrating potential for non-compliance, additional attended monitoring will be performed to confirm whether there is non-compliance, as per **Section 4.3**. Additional locations and potentially monitoring events may be undertaken where complaints have occurred, if the complainant has agreed to the monitoring.

Unattended Real-Time Noise Monitoring

4.1.2

Unattended real-time noise monitoring is carried out using a combination of one (1) omnidirectional fixed monitoring unit, three (3) multidirectional monitors, one (1) mobile monitor and one (1) weather station. **Figures 5** and **6** display the locations of the unattended real-time noise monitors; however they may be relocated in consultation at the request of local landholders to further understand noise impacts.

The weather station is located near Ulan Complex Surface Operations administration area and is referred to as "SX71M2" by UCMPL and "Point 32" in *EPL 394*. The network of monitors notifies relevant personnel when noise levels at surrounding sensitive receivers are approaching, or have reached, the pre-defined trigger noise level. The trigger noise levels and corresponding actions are further discussed in **Section 4.2**.

The directional monitors are able to measure and therefore facilitate quantifying noise from a given direction. The equipment is programmed to record the L_{Amax} , L_{A1} , L_{A10} , L_{A90} and L_{Aeq} noise levels for each 15 minute time period. The unattended real-time units are maintained by UCMPL and calibrated by the equipment suppliers, in accordance with the manufacturer's specifications and Australian Standards.

Continuous real time stability class data is accessed from SX71M2, consistent with the requirements of *EPL 394*²⁷ which requires measurement of Sigma Theta. The *NSW Industrial Noise Policy* and the *Noise Policy for Industry*²⁸, provides that any of; temperature lapse rate; Pasquill-Gifford scheme; and Sigma Theta calculation methods may be used as standard monitoring methods for noise assessments. Temperature lapse rate data, as required by PA 08_0184²⁹ is available from a weather monitoring station at WCM, approximately 10 kilometres west, south west of the Ulan operations in the same airshed, and is considered suitably representative for the site.

The parameters recorded by SX71M2 include rainfall, sigma theta, solar radiation, temperature (at 1.5 metres, 10 metres and 30 metres), wind speed (horizontal and vertical) and wind direction (10 metres and 30 metres). This allows for up to date predictions to be made on the impact of weather conditions on mining operations and noise emissions from mining operations.

The locations of the unattended real-time noise monitoring sites are as follows:

²⁶ ULNCX-111515275-870 – Environmental Management Strategy.

²⁷ Environment Protection Licence 394, Condition M4.2.

²⁸ *NSW Industrial Noise Policy (2000)*, Appendix D.

²⁹ Project Approval 08_0184, Schedule 3, Condition 23(b).

Table 4-2 – Real-Time Noise Monitoring Sites

Real-Time Monitoring Site	Eastings	Northings	Property ID	Location
Sentinex 71	753333	6427209	UCMPL owned	Marshall
Sentinex 73 [^]	751674	6436389	80	Bush
Sentinex 120	751312	6431132	113	Hoare
Sentinex 121 [#]	756545	6423764	MCM owned	Richter

Notes:

[^] *Sentinex 73 is omnidirectional and fixed. All other Sentinex units are multidirectional and mobile.*

[#] *Sentinex 121 is the noise monitor shared with MCO used for Cumulative Noise Management (Section 4.1.3). SMS alerts are not sent for alarms by this monitor.*

Six (6) months prior to the construction of the proposed downcast ventilation fan for the Ulan West project adjacent to Location 254 (i.e. NM7), a real-time noise monitor was established to assess baseline and commissioning noise data.

The unattended real-time noise monitoring units are programmed to send a SMS to environmental staff and key operational personnel if a trigger noise level is reached. SMS alerts are triggered based on the *Draft Noise Monitoring Application Note*. This facilitates a review of operations in combination with meteorological conditions in order to minimise the risk of noise level exceedances, prior to complaints from the community. SMS alert trigger levels for the nominated locations are summarised in Error! Reference source not found.the proactive responses to alarm levels listed below.

If alarms are triggered from the real-time noise monitoring instrumentation, the following actions are taken by Ulan Surface Operations OCEs:

- Identify if the noise is associated with operations at Ulan Complex. This may be done by listening to the audio MP3 file and direction of the noise if the monitor is directional;
- Confirm that the noise event has not been triggered by meteorological condition including rainfall events and/or wind gusts greater than 5m/s (see **Section 4.1.2.2** for more details on data exclusions)³⁰;
- Review the wind direction data to evaluate whether this may be associated with the trigger;
- Evaluate the activities on site and identify the source, if possible, from the audio MP3 file;
- Identify and implement measures to mitigate the noise, subject to feasibility, including:
 - Move equipment or relocate operations temporarily;
 - Reduce intensity of operation, for example, reducing number of plant, using quieter plant etc; and
 - Switch off items of plant temporarily;
- Document the event, details and action taken.

4.1.2.2

Noise data (including limited localised meteorological data such as wind speed and direction) from the real-time units is also sent daily via email (for the previous 24 hour period) to the ECO. This data is reviewed, especially in the context of consecutive alarms or community complaints, noise level, frequency and actual noise (from MP3 files) are interrogated to determine sources.

Data Exclusion

In order to exclude extraneous noise as well as noise affected by inclement weather from the unattended real-time monitoring data in accordance with relevant procedures and exemptions (including certain meteorological conditions) of the *NSW Industrial Noise Policy*, the following exclusion rules shall apply:

- Low pass filter (12.5 Hz to 630 Hz) to minimise extraneous noise, e.g. birds, insects etc;

³⁰ **Note:** SX71M2 is linked directly to the unattended real-time noise monitoring system and allows predicted impacts on mining operations and noise conditions due to weather to be made.

- L_{Aeq} , 15min (low frequency) exceeds the L_{A90} by more than 5dB(A);
- L_{Aeq} , 15min (low frequency) exceeds the L_{A10} noise level;
- L_{Aeq} , 15min (low frequency) exceeds the previous L_{Aeq} , 15min by more than 7dB(A) and followed by a rapid decrease noise level;
- Temperature inversion conditions (stability category), to be determined by the sigma theta method;³¹
- Rainfall; and
- Winds exceeding 5m/s.

Once all extraneous noise and noise affected by inclement weather has been excluded, an assessment will be undertaken to determine compliance with the noise criteria. For the purposes of determining compliance, data collected during periods where wind speeds exceed 5m/s will also be excluded³².

Cumulative Noise Management

4.1.3

Sentinex 121 is the noise monitor that is shared between UCMPL and MCM. The data collected from it has been analysed to determine that contributions can be identified.

UCMPL will include a measurement of cumulative impacts during each attended noise monitoring round. Where it is identified that a potential cumulative noise issue has occurred, results of the monitoring will be provided to MCM, and a joint meeting to discuss cumulative noise management and monitoring will be held between the two Environment and Community Managers, or their delegates to determine an appropriate response.

In the event there is a recorded exceedance of the cumulative noise criteria, the exceedance will be reported to the relevant agency identified in **Section 4.5**.

4.2 Proactive Noise Management

Following a Level 1 alarm, a review of operations closest to the monitoring location will be conducted within a practical timeframe to determine if the measured noise is attributable to Ulan Complex. This review may consist of a physical inspection of the operations and/or utilising the audio streaming functionality on the unattended real-time noise monitors to determine if the noise source is likely to be from Ulan Complex. The review will take into account current meteorological conditions. Where appropriate, management and mitigation measures, as detailed in this plan, will be undertaken in order to ensure compliance with the noise limits discussed in **Section 3.1**.

Following a Level 2 alarm, a critical review of current operations in respect to identifying likely noise sources for the alarm will be undertaken as soon as practicable. This review can consist of a physical inspection of the operations and/or utilising the audio streaming functionality on the real-time noise monitors to determine if the noise source is likely to be from Ulan Complex. If the likely noise source(s) can be identified and are attributable to Ulan Complex, the relevant equipment and/or operations determined to be contributing to the measured noise impacts will either cease or be modified within a practicable time.

SMS alert trigger levels for the nominated locations are summarised in Error! Reference source not found. the below **Table 4-3**.

³¹ NSW Industrial Noise Policy (2000), (superseded), Appendix E, Part E4,

³² NSW Industrial Noise Policy (2000), (Superseded).

Table 4-3 – Real-Time Monitor SMS Alert LAeq Trigger Levels

Location	Trigger Alert Level	Evening (dB(A))	Night (dB(A))
Marshall	Level 0	<31	<31
Bush	Level 0	<31	<31
Hoare	Level 0	<31	<31
Other privately owned residences	Level 0	<31	<31
Marshall	Level 1	31	31
Bush	Level 1	31	31
Hoare	Level 1	31	31
Other privately owned residences	Level 1	31	31
Marshall	Level 2	33	33
Bush	Level 2	33	33
Hoare	Level 2	33	33
Other privately owned residences	Level 2	33	33
Marshall	Level 3	35	35
Bush	Level 3	35	35
Hoare	Level 3	35	35
Other privately owned residences	Level 3	35	35

In addition to following the above steps for a Level 3 alarm, if two consecutive Level 3 alarms are recorded, and the review process indicates the noise may be from mine operations, attended monitoring will be arranged to be conducted within the following 7 days by an appropriately accredited and qualified acoustic consultant.

These trigger levels will be reviewed and revised based on the results of unattended real-time monitoring.

Historical data from the unattended real-time monitors is reviewed progressively to establish any correlation between high noise levels from specific operations (for example overburden emplacement) and wind speed and direction. This data is then be used to guide operations under prevailing wind speed and direction from the meteorological stations.

4.3 Exceedance and Systemic Exceedances

The protocol for exceedances and systemic exceedances is as follows:

- Where the noise measurement is a short-term noise measurement over a 15 minute period, then an exceedance of the noise limit is to be confirmed via completion of a second 15 minute reading.
- If the second reading exceeds criteria and is attributable to Ulan Complex measurement is to be considered a non-compliance, as detailed in **Section 4.1.1**.

4.4 Environmental Incidents

In accordance with section 3.4.11 of the EMS³³, all UCMP employees and contractors must report environmental incidents to their immediate supervisor/site contact who will contact a member of the Environment and Community Department, immediately after becoming aware of the incident.

The details and final investigation results from all environmental incidents must be recorded on the Incident Investigation Report³⁴ and provided to Environment and Community Manager for review. All environmental incidents are to be recorded in CMO.

³³ ULNCX-111515275-870 Environmental Management Strategy.

³⁴ GCAA-625378177-10439 Incident Investigation Report.

4.5 Reporting Requirements

All external and internal reporting is undertaken in accordance with the reporting requirements of the EMS³⁵. Reporting requirements are presented in **Table 4-4** below.

Table 4-4 – Reporting Requirements

Requirement	Trigger	Agency
Annual Review [#]	Project Approval	DPIE – Manager Mining Projects DRE OEH NOW MWRC
Exceedance and Non Compliance Reporting	Following any occasion of incident	DPIE – Manager Mining Projects DRE
EPL Annual Return*	EPL 394	OEH
Quarterly Environmental Monitoring Summaries*	Project Approval	UCMPL Website www.ulancoal.com.au
EPL 14 day Reports*	EPL 394	UCMPL Website www.ulancoal.com.au

*Monitoring results provided in these reports will include attended noise monitoring locations as specified in section 4.1.1.

Monitoring results provided in the annual review will include attended noise monitoring locations as specified in section 4.1.1 and a summary of exceedances and non-compliance..

The Annual Review summarises results and analyses data collected against both the compliance criteria and the EA predicted levels. The construction phase of the project was completed in early 2015 and the measured noise levels were consistent with predicted levels in relevant years.

4.6 Community Complaints

All community complaints received by the Ulan Complex are managed in accordance with the EMS³⁶ the *Complaints Procedure*³⁷.

4.7 Non Conformity, Corrective Action and Preventative Action

Non-compliances are tracked and managed in accordance with *11.01 Environmental Compliance Management*³⁸ and associated documentation maintained in accordance with *11.01 Environmental Data Collection and Review*³⁹ details the procedure for handling and investigating of non-compliance, including allocation of responsibility, external and internal reporting requirements, and initiating and completing corrective and preventative actions.

³⁵ ULNCX-111515275-870 Environmental Management Strategy.

³⁶ ULNCX-111515275-870 Environmental Management Strategy.

³⁷ ULNCX-111515275-3376 Complaints Procedure.

³⁸ GCAA-625378177-10301 11.01 Environmental Compliance Management.

³⁹ GCAA-625378177-10274 11.01 Environmental Data Collection and Review.

Non-compliance may be identified through:

- environmental monitoring programs;
- receiving community complaints;
- site inspections;
- internal communication;
- incident reports; and
- audit findings.

Where a potential non-compliance due to site operations has been identified from real-time noise monitoring, proactive noise management methods identified in **Section 4** will be implemented as required.

In the event of a non compliance of approval conditions relevant regulatory agencies will be notified as per **Section 4.5**.

5 Review and Improvement

Ongoing monitoring and review on the performance and implementation of the Noise Management Plan are undertaken in accordance with *Environmental Data Collection and Review*⁴⁰ and the *EMS*⁴¹.

The NMP is to be reviewed in consultation with the Director-General of the DPIE, EPA and MWRC, as required by recommendations arising from the Independent Environmental Audit, or after any significant changes to the operation. The review will reflect changes in environmental expectations, technology and operational procedures.

After the submission of the Annual Review Report, UCMP will review, and if necessary revise, the strategies, plans, and programs required under PA 08_0184 to the satisfaction of the Secretary within 3 months of:

- a) the submission of an annual review⁴²;
- b) the submission of an incident report⁴³;
- c) the submission of an audit report⁴⁴; and
- d) any modification to the conditions of this approval, (unless the conditions require otherwise).

⁴⁰ GCAA-625378177-10274 11.01 Environmental Data Collection and Review.

⁴¹ ULNCX-111515275-870 Environmental Management Strategy.

⁴² Project Approval 08_0184 Schedule 5, Condition 3.

⁴³ Schedule 5, Condition 6, Project Approval 08_0184.

⁴⁴ Project Approval 08_0184, Schedule 5, Condition 8.

6 Accountabilities

Section 6 of the UCMPL EMS (ULNCX-111515275-870) details the roles and accountabilities for all employees, contractors and suppliers. Specific roles and accountabilities for employees and contractors in relation to the NMP are outlined below.

Role	Accountabilities for this document
Operations Manager	<ul style="list-style-type: none"> • Approve appropriate resources for the implementation of this Plan. • Ensure the effective implementation of strategies designed to reduce noise impacts from the operation. • Ensure any potential or actual noise issue is reported in accordance with legal requirements and the corporate standard. • Authorise internal and external reporting requirements of this plan. • Approve subsequent revisions of this plan.

Role	Accountabilities for this document
Environment and Community Manager	<ul style="list-style-type: none"> • Provide that sufficient resources are allocated for the implementation of this Plan. • Ensure appropriate resources are budgeted for to enable appropriate monitoring and management of noise. • Ensure that noise considerations are undertaken in the installation of all new infrastructure for the operation. • Identify noise risks and impacts to the environment and assess resources required to mitigate identified risks and impacts within the site. • Ensure that noise management controls are implemented in accordance with this Plan. • Ensure that the results of monitoring are evaluated and reported to senior management and to relevant personnel for consideration as part of ongoing mine planning. • Ensure any potential or actual noise issue is reported in accordance with legal requirements and the corporate standard. • Provide visible and proactive leadership in relation to the noise management. • Ensure that operational changes consider the potential impacts of noise emissions to adjacent private landowners. • Ensure all internal and external reporting requirements are met, including incident reporting in accordance with EMS. • Ensure all reporting complies with internal and external monitoring standards, protocols and regulations. • Proactively engage government and community as required. • Coordinate the ongoing review of this Plan. • Review and approve external reports e.g. Annual Review Report, prior to final approval by the Operations Manager. • Develop, implement and maintain noise monitoring and response protocol with neighbouring mines.

Role	Accountabilities for this document
Environment & Community Coordinator	<ul style="list-style-type: none"> • Manage and maintain the noise monitoring programs in accordance with this plan. • Ensure monitoring equipment is operated in accordance with relevant industry standards and protocols. • Ensure that all monitoring records are effectively maintained on site in accordance with the EMS. • Coordinate the collation and evaluation of monitoring data. • Conduct periodic environmental inspections in accordance with the EMS. • Ensure any potential or actual noise management issue, including incidents and non compliance is reported to the ECM. • Coordinate incident investigation processes including associated reporting requirements, in accordance with the EMS. • Coordinate the implementation of any corrective actions and evaluate their effectiveness. • Provide visible and proactive in relation to noise management. • Participate in the ongoing review of this Plan. • Ensure the effective implementation of strategies designed to reduce noise impacts from the operation. • Co-ordinate baseline noise monitoring surveys and develop strategies in consultation with affected parties to minimise noise impacts.

Role	Accountabilities for this document
Surface Projects Coordinator	<ul style="list-style-type: none"> • Provide that sufficient resources are allocated for the implementation of this Plan, as required. • Ensure adequate resources are budgeted for in relation to noise monitoring for their task/project. • Implement and manage changes through UCMPL's Change Management process. • Ensure that noise considerations are undertaken in the installation of all new infrastructure to be installed at the project. • Ensure operational changes consider the potential impacts of noise emissions from the project to adjacent residences. • Monitor that team members and contractors carry out work appropriate monitoring and maintenance tasks. • Ensure any potential or actual noise management issue is controlled, or otherwise isolated. • Ensure any potential or actual noise management issues, including environmental incidents, are reported to the ECM. • Conduct regular inspections of the work area to monitor compliance with this plan. • Provide input to management on the adequacy and effectiveness of this plan. • Ensure the effective implementation of strategies designed to reduce noise impacts from the project. • Provide visible and proactive leadership in relation to noise management. • Ensure personnel working at the operation are aware of the noise obligations whilst working with UCMPL.

Role	Accountabilities for this document
All Supervisors	<ul style="list-style-type: none"> • Provide that sufficient resources are allocated for the implementation of this Plan, as required. • Ensure adequate resources are budgeted for in relation to noise monitoring for their task/project. • Implement and manage changes through UCMPL's Change Management process. • Ensure that noise considerations are undertaken in the installation of all new infrastructure to be installed at the project. • Ensure operational changes consider the potential impacts of noise emissions from the project to adjacent residences. • Monitor that team members and contractors carry out work appropriate monitoring and maintenance tasks. • Ensure any potential or actual noise management issue is controlled, or otherwise isolated. • Ensure any potential or actual noise management issues, including environmental incidents, are reported to the ECM. • Conduct regular inspections of the work area to monitor compliance with this plan. • Provide input to management on the adequacy and effectiveness of this plan. • Ensure the effective implementation of strategies designed to reduce noise impacts from the project. • Provide visible and proactive leadership in relation to noise management. • Ensure personnel working at the operation are aware of the noise obligations whilst working with UCMPL.
All Employees & Contractors	<ul style="list-style-type: none"> • Ensure the effective implementation of this Plan with respect to their work area. • Ensure any potential or actual noise management issues, including environmental incidents, are reported to the Project Manager, Supervisor or Task Coordinator. • Ensure equipment (relevant to task/area of responsibility) is maintained and operated in a proper and efficient manner.

7 Document Information

Relevant legislation, standards and other reference information must be regularly reviewed and monitored for updates and should be included in the site management system. Related documents and reference information in this section provides the linkage and source to develop and maintain site compliance information

7.1 Definitions

Table 7-1 – Definitions

Term	Definition
ABL	The Assessment Background Level is the single figure background level representing each assessment period (daytime, evening and night time) for each day. It is determined by calculating the 10th percentile (lowest 10th percent) background level (L_{A90}) for each period.
AR	Annual Review Report
AS	Australian Standard
BBRA	Broad Brush Risk Assessment
BMP	Blast Management Plan
CAA	Glencore Coal Assets Australia
CHPP	Coal Handling and Preparation Plant
DPIE	NSW Department of Planning, Industry and Environment
EA	Environmental Assessment (Umwelt, 2009)
EMS	Environmental Management Strategy (ULNCX-111515275-870)
EPA	Environmental Protection Authority
EPL	Environment Protection Licence (394)
INP	NSW Industrial Noise Policy
L_{A1}	The L_{A1} level is the noise level which is exceeded for 1% of the sample period. During the sample period, the noise level is below the L_{A1} level for 99% of the time.
L_{A10}	The L_{A10} level is the noise level which is exceeded for 10% of the sample period. During the sample period, the noise level is below the L_{A10} level for 90% of the time. The L_{A10} is a common noise descriptor for environmental noise and road traffic noise.
L_{A50}	The L_{A50} level is the noise level which is exceeded for 50% of the sample period. During the sample period, the noise level is below the L_{A50} level for 50% of the time.
L_{A90}	The L_{A90} level is the noise level which is exceeded for 90% of the sample period. During the sample period, the noise level is below the L_{A90} level for 10% of the time. This measure is commonly referred to as the background noise level.
L_{Aeq}	The equivalent continuous sound level (L_{Aeq}) is the energy average of the varying noise over the sample period and is equivalent to the level of a constant noise which contains the same energy as the varying noise environment. This measure is also a common measure of environmental noise and road traffic noise.
L_{Amax}	Maximum Noise Level – The maximum noise level over a sample period is the maximum level, measured on fast response, during the sample period.
MCM	Moolarben Coal Mine
MWRC	Mid Western Regional Council
NMP	Noise Management Plan
NMS	National Mining Services (Contractors)
NRP	Noise Reduction Plan
PA 08_0184	Project Approval 08_0184
RBL	The Rating Background Level for each period is the median value of the ABL values for the period over all of the days measured. There is therefore an RBL value for each period – daytime, evening and nighttime.
RTA	NSW Roads and Traffic Authority
UCMPL	Ulan Coal Mines Pty Limited
WCM	Wilpinjong Coal Mine

7.2 Related Documents

Related documents, listed in **Table 7-2** are internal documents related directly to or referenced from this document.

Reference	Title
Glencore Coal Assets Australia Guidelines	GCAA-625378177-9978 11.0 Environment
	GCAA-625378177-10301 11.01 Environmental Compliance Management
	GCAA-625378177-9992 6.0 Incident
	GCAA-625378177-10394 Incident Investigation
	GCAA-625378177-10294 10.01 Stakeholder Engagement
	GCAA-625378177-10317 11.01 Annual Environment and Community Risk Assessment
	GCAA-625378177-10238 11.11 Noise Management
	GCAA-625378177-10274 11.01 Environmental Data Collection and Reporting
UCMPL	ULNCX-111515275-870 Environmental Management Strategy
	ULNCX-111515275-3376 Complaints Procedure
	ULNCX-111515275-3537 Stakeholder Engagement Plan
	ULNUG-849165555-8789 Hazard & Incident Management Procedure
	ULNOC-1105874907-2656 Incident Management Procedure
	ULWUG-729531900-93 Incident and Hazard Management
	ULNCX-111515275-1953 Blast Management Plan
	ULNOC-1105874907-1747 Training and Competency Management Standards (USO)
	ULNUG-849165555-5762 Training and Competency Management Standards (UUG)
	ULWUG-729531900-105 Training and Competency Management Standards (UWO)
	ULNCX-111515275-2432 Pollution Incident Response Management Plan (PIRMP)
	Data Sharing Deed, Moolarben and Wilpinjong
External	Project Approval 08_0184
	Environment Protection Licence 394
	Eco Logical (2018) Environmental Assessment Modification to Ulan Continued Operations, Longwall Optimisation Project (January 2018)
	Umwelt (October 2009) Ulan Coal Continued Operations Environmental Assessment
	Umwelt (2011) Ulan Coal Continued Operations North 1 Underground Mining Area, Minor Modification to Ulan No.3 & Ulan West Mine Plans & Proposed Concrete Batching Plant
	Umwelt (May 2012) Environmental Assessment Modification to Ulan Coal Continued Operations, Ulan West Mine Plan (Approved Panels 1 – 4) and Construction Blasting
	Wilkinson Murray (September 2009) Ulan Coal Mine, Ulan Coal – Continued Operations Noise & Vibration Assessment, Report No 97306-S2 Version F
	UCMPL (Feb 2008) Revised Noise Reduction Program (Seq No. 35/08)

7.4 Reference Information

Reference information, listed in **Table 7-3 – Reference Information**

below, is information that is directly related to the development of this document or referenced from within this document.

Table 7-3 – Reference Information

Reference	Title
Legislation/ Regulation/Policy	<i>Environment Planning and Assessment Act 1979 (NSW)</i>
	<i>Protection of the Environment Operations Act 1997 (NSW)</i>
	<i>NSW Industrial Noise Policy (2000) (superseded)</i>
	<i>Noise Policy for Industry (2017)</i>
	<i>NSW Road Noise Policy (2011)</i>
	NSW Draft Guideline – Mining. Noise Monitoring Application Note 2014
	<i>RTA Environmental Noise Management Manual, Roads and Traffic Authority 2001</i>
	<i>ANZECC Guideline to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (1990)</i>
Australian Standards	AS 1055.1-1997, AS 1055.2-1997 and 1055.3-1997 <i>Acoustics – Description and measurement of environmental noise (superseded).</i>
	AS 2659.1-1998 <i>Guide to the use of sound measuring equipment (withdrawn)</i>
	AS 2659.2-1983 <i>Sound level meters (withdrawn)</i>
Glencore Coal Assets Australia Guidelines	GCAA-625378177-9978 11.0 Environment
	GCAA-625378177-10301 11.01 Environmental Compliance Management
	GCAA-625378177-9992 6.0 Incident
	GCAA-625378177-10394 Incident Investigation
	GCAA-625378177-10294 10.01 Stakeholder Engagement
	GCAA-625378177-10317 11.01 Annual Environment and Community Risk Assessment
	GCAA-625378177-10238 11.11 Noise Management
	GCAA-625378177-10274 11.01 Environmental Data Collection and Reporting

7.5 Change Information

Full details of the document history are recorded in the document control register, by version. A summary of the current change is provided in Table 7-4

Table 7-4 – Change to Information

Version	Date	Review team (consultation)	Change Summary
1	31 December 2010	Jamie Lees, Cheryl Henriques	Prepare Noise Management Plan in accordance with Project Approval 08_0184
2	31 March 2011	Jamie Lees, Stephen Bragg, Cheryl Henriques, DECCW	Prepare Noise Management Plan in accordance with Project Approval 08_0184
3	1 April 2011	Cheryl Henriques	Formatting – no change to content
4	8 July 2011	Cheryl Henriques, Jamie Lees	Updated following comments from DoPI
4.1	30 May 2012	Ian Flood, Robyn Stoney, Tara Stokes, Rachel Murray	Annual Review and update based on MOD 1 & 2, and EPL394 variation
4.2	10 June 2013	Tara Stokes, Robyn Stoney	<p>AER 2012 Management Plan Review Mine plans were revised as per DP&I advice of versioning issue.</p> <p>EPL394 requires attended noise monitoring to occur at NM1, which is now UCMPL owned and no longer a sensitive receiver. Request will be submitted to EPA to remove requirement to monitor NM1 from EPL394. Comment to this effect added in attended noise monitoring section 4.1.1 of the NMP.</p> <p>Revisions to section 3.2 to clearly articulate implementation requirements.</p> <p>The reporting section was updated to specify what results will be reported for each required report, including publically available information.</p> <p>Specific requirement for the commencement of monitoring of NM7 and 8 after the commissioning of the Ulan West end block ventilation facility was removed from management plan. Removed requirement as was not consistent with monitoring requirement under EPL394 Section 4.1.1, which requires monitoring throughout the project.</p>
4.3	10 September 2013	Robyn Stoney	<p>Audit review:</p> <p>Section 2.5.2 Neighbouring mining operations updated to reflect current status of Cumulative Noise Monitoring Protocol, availability of equipment and response in accordance with UCMPL Noise TARPs</p>
4.5	20 June 2014	Robyn Stoney, Tara Stokes, Stephen Bragg	<ul style="list-style-type: none"> •Update figures and tables and TOC; •Formatting; •Align document to Glencore requirements; and •Update status of monitoring programs and agreements with receivers. .
5	28 June 2015	Tom Frankham, Robyn Stoney	An additional alarm level for the real-time monitoring equipment was included for

Version	Date	Review team (consultation)	Change Summary
			<p>consistency with NSW Draft Guideline – Mining. Noise Monitoring Application Note 2014, provided by NSW Planning and Environment. References to a real-time monitor (Sentinex 72) that was not part of the current monitoring support network were removed.</p> <p>The document was updated to the Glencore noise protocol and template.</p>
5.1	14 June 2016	Robyn Stoney	Incorporate MOD 3 updates
6.0	20 June 2018	Jake Hawkins, Robyn Stoney	Minor updates to plans, corrections to text
6.2	12 February 2019	Kellie Smith, Robyn Stoney	Full review of document which included corrections to text, removal of duplicate statements, update to format and outline of document, corrections regarding compliance and procedures.
7.0	April 2019	Robyn Stoney, Robbie Mills	Minor review following DPIE feedback. Version approved 15/05/2019.
7.1	15 October 2019	Kellie Smith and Robyn Stoney	Removed the requirement for day noise alarms. Add MOD 4 construction noise criteria as limits. MOD 4 also requires preparation of a construction noise management plan prior to the implementation of the infrastructure. The review incorporates consideration of the 2019 Independent audit and the 2018 annual review but no changes were identified from these processes.
7.2	July 2020	Robyn Stoney and Kellie Smith	Inclusion of construction standard for Coal Handling Infrastructure (Section 2.3.4). Include EPL394 criteria.
7.3	August 2020	Jake Hawkins and Kellie Smith	<p>Updated Ulan Coal Mines Pty Limited (UCML) to Ulan Coal Mines Pty Limited (UCMPL), and Department of Planning and Environment (DP&E) to Department of Planning, Industry and Environment (DPIE) as advised by the EPA (5 August 2020).</p> <p>Updated Section 4.1.2 to include note that Sentinex 121 is shared with MCO, used for Cumulative Noise Management and does not send SMS alerts for noise alarms. Updated Section 4.1.3 to refer to Sentinex 121.</p>
7.4	September 2020	Jake Hawkins	MOD 5 administrative changes, inclusion of MOD5 approval and updated operations plan layout.