

INTEGRA UNDERGROUND

GLENCORE



Noise Management Plan

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Owner: Environment and Community Manager

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Uncontrolled unless viewed on the intranet

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1. Introduction

1.1 Background

This Noise Management Plan is one of a series of Environmental Management Plans that together form the Environmental Management System for the Glencore Integra Underground Mine, herein referred to as Integra Underground.

The Integra Underground is approximately 12 km north-west of Singleton, in the Singleton Local Government Area (see **Figure 1**). Underground mining operations are approved at a maximum extraction rate of 4.5 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal until 31 December 2035 under Project Approval PA 08_0101 (as modified). This approval allows longwall mining of the Hebden, Barrett and Middle Liddell seams to produce high quality, semi-hard coking coal for export.

The Integra Underground was formerly a part of the larger Integra Mine Complex. This complex comprised both underground and open cut operations and operated under a single project approval instrument which combined the project approvals for the Integra Underground (PA 08_0101) and Integra Open Cut (PA 08_0102). In late 2015, HV Coking Coal Pty Ltd (HVCC) (a 100% Glencore-owned company) acquired all assets associated with the Integra Underground, which had been placed in care and maintenance in May 2014. Bloomfield Collieries Pty Limited (Bloomfield) purchased the open cut and surface facilities (subsequently re-named the Rix's Creek North Mine).

Following the separate sale of the underground and open cut, the combined project approval was modified to separate the approvals. Following the separation of the approvals Integra Underground operated under PA 08_0101 as modified.

HVCC recommenced underground operations in 2017, with development resuming in February 2017 and longwall extraction resuming in May 2017 in accordance with the Extraction Plan as required under Condition 20 of Schedule 3 of PA 08_0101. An application for a further modification to PA 08_0101 (MOD 7) and accompanying Environmental Assessment (EA) was lodged with the Department of Planning and Environment (now Department of Planning, Industry and Environment, DPIE) in June 2017. Subsequently, approval was granted by DPE on 15 September 2017. The modification application was made to facilitate the construction of a water pipeline from Integra Underground to the adjacent Mt Owen Glendell Operations and the subsequent use of the pipeline to transfer mine water. The modification enables surplus mine water collected at Integra Underground to be managed at Mt Owen Glendell Operations and within Glencore's Greater Ravensworth Area Water Sharing Scheme (GRAWSS).

An application for Modification 8 (MOD 8) to PA 08_0101 and accompanying EA was lodged with the DPE in November 2017. Approval was granted by DPIE on 16 April 2018. MOD 8 allows continuation of longwall mining of the Middle Liddell Seam further to the north of the currently approved longwall panels, along with the construction and operation of ancillary surface infrastructure required to support the mining activities.

1.2 Objectives of the Noise Management Plan

This management plan satisfies Schedule 3 Condition 9 of PA 08_0101, which requires the preparation of a Noise Management Plan.

The objectives of this management plan are to:

- establish a noise monitoring system to assess the noise impact on surrounding sensitive receivers and performance against the specific noise impact assessment criteria;
- detail the general controls to be implemented to minimise noise emissions from the site;
- provide a mechanism to assess monitoring results against noise impact assessment criteria and land acquisition criteria to evaluate compliance including exceedance reporting and independent review;
- establish a continued improvement protocol for noise performance at the site; and
- manage noise related community complaints in a timely and effective manner.

1.3 Statutory requirements

1.3.1 Project Approval

PA 08_0101 stipulates requirements related to this Noise Management Plan. These are summarised in **Table 1-1**.

Table 1-1 – Relevant Development Consent Conditions

PA 08_0101 Condition	Project Approval Condition Description	Relevant Section of Plan
Schedule 3, Condition 2 Noise Criteria and Noise Monitoring	<p>Except for the land referred to in Table 1 for which the acquisition basis is noise, the Proponent must ensure that the noise generated by the project (excluding construction works specified in conditions 2A and 2B of Schedule 3) 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.</p> <p>However, these criteria do not apply if the Proponent, or another mining company, has acquired the land or 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> <p>Noise generated by the project is to be measured in accordance with the relevant requirements of the INP (as amended from time to time) or an equivalent NSW Government noise policy. Appendix 5 sets out the requirements for evaluating compliance with these criteria.</p> <p>The noise criteria in Table 2 only have effect when, in the opinion of the Secretary, open cut mining operations at Rix's Creek North have been placed on care and maintenance or have permanently ceased.</p>	Section 4.2, 4.3, 4.4.1

PA 08_0101 Condition	Project Approval Condition Description	Relevant Section of Plan
Schedule 3, Condition 2A	<p>The Proponent must manage noise from construction activities associated with the water pipeline infrastructure and Modification 8, in accordance with the noise management levels defined in Table 2 of the <i>Interim Construction Noise Guideline</i>.</p> <p>During construction of the water pipeline infrastructure and Modification 8, the Proponent must ensure that combined operational and construction noise from the development does not exceed a level of 5 dB(A) above the daytime operational $L_{Aeq}(15min)$ noise criteria in Table 3 during Standard Construction Hours (7 am to 6 pm, Monday to Friday; and 8 am to 1 pm on Saturdays) and does not exceed the evening or night time operational $L_{Aeq}(15min)$ noise criteria in Table 2, except where an alternative temporary limit has been approved by the Secretary for specific works or where the Proponent has an agreement with the owner/s of the relevant residence/land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Section 2.2.5, 4.2, 4.3, 4.4.1
Schedule 3, Condition 2A	<p>In seeking an alternative temporary construction noise limit above the levels identified in condition 2A, the Proponent must submit a Construction Work Noise Protocol to the Secretary for approval, prior to undertaking the nominated construction works. This protocol must:</p> <ul style="list-style-type: none"> (a) be prepared to the satisfaction of the Secretary; (b) be prepared in consultation with the EPA and any landowners who may be affected by the proposed variation; and (c) address the relevant requirements of the Interim Construction Noise Guideline. <p>The Proponent may only undertake construction activities that require a Construction Work Noise Protocol, in accordance with a Construction Work Noise Protocol as approved from time to time by the Secretary.</p>	Section 2.2.5
Schedule 3, Condition 3 Noise Acquisition Criteria	<p>If noise generated by the project (excluding construction works specified in conditions 2A and 2B of Schedule 3) 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 must acquire the land in accordance with the procedures in conditions 7 and 8 of Schedule 4.</p> <p>Noise generated by the project is to be measured in accordance with the relevant requirements of the INP. Appendix 5 sets out the requirements for evaluating compliance with these criteria.</p> <p>The acquisition noise criteria in Table 3 only have effect when, in the opinion of the Secretary, open cut mining operations at Rix's Creek North have been placed on care and maintenance or have permanently ceased.</p>	Section 4.2, 4.3, 4.4.1

PA 08_0101 Condition	Project Approval Condition Description	Relevant Section of Plan
Schedule 3, Condition 4 Cumulative Noise Criteria	<p>The Proponent must 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 vicinity 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 (except for the residential receivers in Table 1 for which the acquisition basis is noise). The Proponent must share the costs associated with implementing these measures on as equitable basis as possible with the relevant mines.</p> <p>Cumulative noise is to be measured in accordance with the relevant requirements of the INP. Appendix 5 sets out the requirements for evaluating compliance with these criteria.</p> <p>For the purposes of this condition, 'reasonable and feasible avoidance and mitigation measures' includes, but is not limited to, the requirements in conditions 8 and 9 to develop and implement a real-time noise management system that ensures effective operational response to the risk of exceedance of the criteria.</p>	Section 3, 4.2, 4.3, 4.4.1
Schedule 3, Condition 5 Cumulative Noise Acquisition Criteria	<p>If the noise generated by the project combined with the noise generated by other mines in the vicinity exceeds the criteria in Table 5 at any residence on privately-owned land or on more than 25 percent of privately-owned land (except for the residential receivers in Table 1 for which the acquisition basis is noise), then upon receiving a written request for acquisition from the landowner, the Proponent must acquire the land on as equitable basis as possible with the relevant mines in accordance with the procedures in conditions 7 and 8 of Schedule 4.</p> <p>Cumulative noise is to be measured in accordance with the relevant requirements of the in INP. Appendix 5 sets out the requirements for evaluating compliance with these criteria.</p>	Section 4.2, 4.3, 4.4.1
Schedule 3, Condition 6 Additional Noise Mitigation Measures	<p>Upon receiving a written request from the owner of any residence:</p> <ul style="list-style-type: none"> a) on the land listed in Table 1 for which the acquisition basis is noise; or b) on the land listed in Table 6; or c) on privately-owned land where subsequent noise monitoring shows the noise generated by the project is greater than or equal to the criteria in Table 7, the Proponent must implement additional noise mitigation measures (such as double-glazing, insulation, and/or air conditioning) at the residence in consultation with the landowner. <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>Cumulative noise is to be measured in accordance with the relevant requirements of the INP. Appendix 5 sets out the requirements for evaluating compliance with these criteria.</p> <p>The additional mitigation measures in Tables 6 and 7 only have effect when, in the opinion of the Secretary, open cut mining operations at Rix's Creek North have been placed on care and maintenance or have permanently ceased.</p>	Section 4

PA 08_0101 Condition	Project Approval Condition Description	Relevant Section of Plan
Schedule 3, Condition 7 Additional Noise Mitigation Measures	<p>If the cumulative noise generated by the project combined with the noise generated by other mines in the vicinity exceeds the criteria at any residence on the land referred to in Table 8, then upon receiving a written request from the owner, the Proponent must implement additional noise mitigation measures (such as double-glazing, insulation, and/or air conditioning) at the residence in consultation with the landowner. The Proponent must share the costs associated with implementing these measures on an equitable basis as possible with the relevant mines.</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>Cumulative noise is to be measured in accordance with the relevant requirements of the INP Appendix 5 sets out the requirements for evaluating compliance with these criteria.</p>	Section 4.4
Schedule 3, Condition 8 Operating Conditions	<p>The Proponent must:</p> <ol style="list-style-type: none"> implement best practice noise management, including all reasonable and feasible noise mitigation measures, to minimise the construction, operational and low frequency noise generated by the project at all times, including during temperature inversions; operate a comprehensive noise management system that uses a combination of predicted meteorological forecasting and real-time noise monitoring data to guide the day-to-day planning of mining operations and the implementation of both proactive and reactive mitigation measures to ensure compliance with the relevant conditions of the approval; implement all reasonable and feasible measures to minimise the release of noise emissions from noisy plant and equipment on site; minimise the noise impacts of the project during meteorological conditions under which the noise limits of the approval do not apply (see Appendix 5); and co-ordinate the noise management on site with noise management at nearby mines (including Ashton, Rix's Creek North, Rix's Creek and the Mt Owen Complex) to minimise cumulative noise impacts, to the satisfaction of the Secretary. 	<p>Section 3</p> <p>Section 3.3.3</p>
Schedule 3, Condition 9 Noise Management Plan	The Proponent must prepare a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:	This plan
	a) be prepared in consultation with the EPA, and then submitted to the Secretary for approval;	Section 1.4
	b) describe the measures that would be implemented to ensure: <ul style="list-style-type: none"> compliance with the noise criteria and operating conditions of the approval; and best management practice is being employed; 	Section 3
	c) describe the noise management system in detail;	Section 3.3

PA 08_0101 Condition	Project Approval Condition Description	Relevant Section of Plan
	d) include a noise monitoring program that: <ul style="list-style-type: none"> uses a combination of real-time and supplementary attended monitoring measures to evaluate the performance of the project; includes a protocol for determining exceedances of the relevant conditions in the approval; evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and 	Section 4.4
	e) includes a protocol that has been prepared in consultation with the owners of nearby mines (including Ashton, Rix's Creek North, Rix's Creek and the Mt Owen complex) to minimise the cumulative noise impacts of the mines.	Section 3.3.3
	The Proponent must implement the approved management plan as approved from time to time by the Secretary.	
Schedule 5, Condition 2	The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:	This plan
	a) detailed baseline data;	Section 2.1
	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; and 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; and 	Section 2.2.2 Section 2
	c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria	Section 3, 4, 4.4
	d) a program to monitor and report on the: <ul style="list-style-type: none"> impacts and environmental performance of the project; and effectiveness of any managements measures (see (c) above); 	Section 4
	e) a contingency plan to manage any unpredicted impacts and their consequences; and	Section 4.4
	f) a program to investigate and implement ways to improve the environmental performance of the project over time;	Section 5.3
	g) a program to regularly review management practices to align with contemporary best practice industry standards;	Section 3.5 Section 5.3
	h) a protocol for managing and reporting any: <ul style="list-style-type: none"> incidents; complaints; non-compliances with the conditions of this approval and statutory requirements; and exceedances of the impact assessment criteria and/or performance criteria; and 	Section 3.3.1, 3.3.2, 3.3.3, 4.3, 4.4
	i) a protocol for periodic review of the plan.	Section 5.3

PA 08_0101 Condition	Project Approval Condition Description	Relevant Section of Plan
Appendix 5, Condition 1	Attended monitoring is used to evaluate compliance with the relevant conditions of this approval	Section 4.2
Appendix 5, Condition 2	Data collected for the purposes of determining compliance with the relevant conditions of this approval is to be excluded under the following meteorological conditions: a) During periods of rain or hail; b) Average wind speed at microphone height exceeds 5 m/s; c) Wind speeds greater than 3 m/s measures at 10 m above ground level; and d) Temperature inversion condition greater than 30C/100 m.	Section 4.4.2
Appendix 5, Condition 3	Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements relating for reviewing performance set out in the INP, in particular the requirements relating to: a) Monitoring locations for the collection of representative noise data; b) Equipment used to collect noise data, and conformity with Australia Standards relevant to such equipment; and c) Modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.	Section 4.2.2 and 4.2.3
Appendix 5, Condition 4	To the extent that there is any inconsistency between the INP and the requirements set out in this Appendix, the Appendix prevails to the extent of the inconsistency.	Noted
Appendix 5, Condition 5	Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station located on the site (as required by condition 16 of Schedule 3).	Section 4.4.2

Table 1-2 includes a description of the obligations that are identified in the Statement of Commitments appended to PA 08_0101.

Table 1-2 – Relevant Statement of Commitments

Desired Outcome	Existing or Proposed Actions	Timing	Relevant Section of Plan
Operations are managed to minimise potential adverse impacts on the environment, residences and the community.	Integra Underground will implement noise management procedures and monitoring programs, as described in Section 3.1 .	Continuous, as required.	Section 3.1
	A blast management protocol will be developed in conjunction with GMO to manage potential impacts from other mine's blasting on the underground mining activities.	Prior to the commencement of proposed mining in the vicinity of open cut mining operations.	Section 1.4
	Integra Underground will investigate the feasibility of installing an overland conveyor to transport coal from the Integra Underground to the Integra CHPP and provide outcomes of that investigation to the Secretary.	Prior to 30 June 2010	Completed Section 3.1

Table 1–3 includes all obligations that are identified within the Environmental Assessments for MOD 7 and MOD 8 to PA 08_0101.

Table 1-3 – Relevant Statement of Commitments from MOD 7

EA Commitment	Timing	Relevant Section of Plan
MOD 7 - Integra to Mt Owen Complex Water Pipeline Modification Environmental Assessment (Hansen Bailey 2017a)		
2. Integra Underground's current dust and noise control practices will be adopted for the Modification.	During pipeline construction and implementation	Complete
3. A Construction Noise management Plan will be prepared if the crossings of Glennies Creek or Glennies Creek Road are required to be constructed outside of standard construction hours.	Prior to pipeline construction across Glennies Creek or Glennies Creek Road	Not required
MOD 8 – Longwall Extension Modification Environmental Assessment (Hansen Bailey 2017b)		
12. The Noise Management Plan will be updated to include mitigation measures relevant to the Modification. The Noise Management Plan will be updated in consultation with relevant authorities.	Following approval of MOD 8	Section 2.2.5 Section 1.4
13. A Construction Work Noise Protocol will be prepared if alternative temporary construction noise limits are sought.	If required	Section 2.2.5

1.3.2 Environment Protection Licence

The Integra Underground operates under Environment Protection Licence (EPL) 3390 issued by the NSW Environment Protection Authority (EPA). EPL 3390 sets specific noise limits (Condition L2.1) for which noise from the premises must not exceed. EPL 3390 also stipulates noise monitoring and reporting requirements. The EPL 3390 conditions relevant to noise are provided in **Table 1-4**.

Table 1-4 - Relevant Environment Protection Licence Conditions

Condition Number	Condition Description	Relevant Section															
P1 Location of monitoring/ discharge point and areas	The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.	Section 4.2															
P1.4	<table><tr><th>EPA identification no.</th><th>Type of monitoring point</th><th>Location description</th></tr><tr><td>15</td><td>42</td><td>42</td></tr><tr><td>16</td><td>39</td><td>39</td></tr><tr><td>17</td><td>40</td><td>40</td></tr><tr><td>18</td><td>35</td><td>35</td></tr></table>		EPA identification no.	Type of monitoring point	Location description	15	42	42	16	39	39	17	40	40	18	35	35
EPA identification no.	Type of monitoring point		Location description														
15	42		42														
16	39		39														
17	40		40														
18	35	35															

Condition Number	Condition Description	Relevant Section																																																												
P1.5	For the purpose of Condition P1.1, P1.2 and P1.3 Figure 1 refers to the plan titled "Integra Underground Operations Figure 2A Plan of Premises - Integra Underground Surface Areas EPL 3390" dated 13/3/2020 EPA Reference DOC20/219762.	Section 4.2																																																												
P1.6	For the purpose of Condition P1.4 Figure 2 refers to the plan titled "Integra Underground Operations Figure 2B Plan of Premises - Integra Underground Surface Areas EPL 3390 (noise)" dated 13/3/2020 EPA Reference DOC20/219762.	Section 4.2																																																												
L3 Noise Limits	Noise from the premises must not exceed the limits specified in the table below:	Section 2.2																																																												
L3.1	<table><tr><th>Location</th><th>Day – LAeq (15minute)</th><th>Evening – LAeq (15minute)</th><th>Night – LAeq (15minute)</th><th>Night– LA1 (1 minute)</th></tr><tr><td>NAG 3 – 87</td><td>42</td><td>42</td><td>42</td><td>49</td></tr><tr><td>NAG 3 - 106</td><td>39</td><td>39</td><td>39</td><td>49</td></tr><tr><td>NAG 3 – All other privately owned land</td><td>40</td><td>40</td><td>39</td><td>49</td></tr><tr><td>NAG 4 – 88, 91, 95, 99, 100, 105, 161</td><td>35</td><td>35</td><td>35</td><td>47</td></tr><tr><td>NAG 4 – All other privately owned land</td><td>42</td><td>42</td><td>37</td><td>47</td></tr><tr><td>NAG 5 – 111</td><td>37</td><td>37</td><td>37</td><td>52</td></tr><tr><td>NAG 5 – 103, 104, 121, 139</td><td>35</td><td>35</td><td>35</td><td>52</td></tr><tr><td>NAG 5 – All other privately owned land</td><td>50</td><td>46</td><td>42</td><td>52</td></tr><tr><td>NAG 6 – 132, 133, 137</td><td>35</td><td>35</td><td>35</td><td>48</td></tr><tr><td>NAG 6 – All other privately owned land</td><td>41</td><td>41</td><td>38</td><td>48</td></tr><tr><td>NAG 7 – All other privately owned land</td><td>45</td><td>42</td><td>39</td><td>49</td></tr></table>		Location	Day – LAeq (15minute)	Evening – LAeq (15minute)	Night – LAeq (15minute)	Night– LA1 (1 minute)	NAG 3 – 87	42	42	42	49	NAG 3 - 106	39	39	39	49	NAG 3 – All other privately owned land	40	40	39	49	NAG 4 – 88, 91, 95, 99, 100, 105, 161	35	35	35	47	NAG 4 – All other privately owned land	42	42	37	47	NAG 5 – 111	37	37	37	52	NAG 5 – 103, 104, 121, 139	35	35	35	52	NAG 5 – All other privately owned land	50	46	42	52	NAG 6 – 132, 133, 137	35	35	35	48	NAG 6 – All other privately owned land	41	41	38	48	NAG 7 – All other privately owned land	45	42	39	49
Location	Day – LAeq (15minute)		Evening – LAeq (15minute)	Night – LAeq (15minute)	Night– LA1 (1 minute)																																																									
NAG 3 – 87	42		42	42	49																																																									
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NAG 4 – 88, 91, 95, 99, 100, 105, 161	35		35	35	47																																																									
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NAG 7 – All other privately owned land	45	42	39	49																																																										
L3.2	For the purpose of condition L3.1 NAG refers to "Noise Assessment Group". All NAG and receiver locations are as referenced in the document titled "Review of EPL Noise Monitoring Points Integra Underground Final March 2020" DOC20/219762 from Development Consent PA 08_0101 Mod - 8 March 2018.																																																													
L3.2	The emission limits identified at condition L2.1 apply under all meteorological conditions except for the following:																																																													

Condition Number	Condition Description	Relevant Section																
	<p>a) Wind speeds greater than 3 metres/second at 10m above ground level; and</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>																	
L3.4	For the purpose of condition L3.3: (a) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of the Appendix E to the NSW Industrial Noise Policy.	Section 4.2.4																
L3.5	For the purpose of monitoring compliance with the noise limit meteorological conditions, the licensee uses a weather station at Ravensworth Mine located at co-ordinates 317848 6410750 (Easting Northing) shown as B on plan titled "Figure 2: Plan of Premises - Integra Underground Surface Areas EPL 3390" dated 5/9/17 EPA Ref DOC17/497320	Section 4.2.4																
M6 Noise Monitoring M6.1	<p>To assess compliance with the noise limits specified within this licence, the licensee must undertake operator attended noise monitoring at each specified noise monitoring point in accordance with the table below.</p> <p>Point 15, 16</p> <table><tr><th>Assessment period</th><th>Minimum frequency in a reporting period</th><th>Minimum duration within an assessment period</th><th>Minimum number of assessment period</th></tr><tr><td>Night</td><td>Quarterly</td><td>15 minutes</td><td>1 operation day</td></tr></table> <p>Point 17, 18</p> <table><tr><th>Assessment period</th><th>Minimum frequency in a reporting period</th><th>Minimum duration within an assessment period</th><th>Minimum number of assessment period</th></tr><tr><td>Night</td><td>Special Frequency 1</td><td>15 minutes</td><td>1 operation day</td></tr></table>	Assessment period	Minimum frequency in a reporting period	Minimum duration within an assessment period	Minimum number of assessment period	Night	Quarterly	15 minutes	1 operation day	Assessment period	Minimum frequency in a reporting period	Minimum duration within an assessment period	Minimum number of assessment period	Night	Special Frequency 1	15 minutes	1 operation day	Section 4.2
Assessment period	Minimum frequency in a reporting period	Minimum duration within an assessment period	Minimum number of assessment period															
Night	Quarterly	15 minutes	1 operation day															
Assessment period	Minimum frequency in a reporting period	Minimum duration within an assessment period	Minimum number of assessment period															
Night	Special Frequency 1	15 minutes	1 operation day															
M6.2	Special Frequency 1 refers to a requirement to undertake monitoring in accordance with Condition M6.4b).	Section 4.2																
M6.3	<p>For the purposes of compliance monitoring and determining the noise generated at the premises the modification factors in the EPA's Fact Sheet C of the Noise Policy for Industry (2017) must be applied, as appropriate, to the noise levels measured by noise monitoring equipment.</p> <p><i>Definitions</i> Noise refers to 'sound pressure levels' for the purpose of conditions L5.1 to L5.4 and condition M10.</p>	Section 4.2.2																
M6.4	<p>To assess compliance with condition L3.1, attended noise monitoring must be undertaken in accordance with Conditions L3.2 to L3.5:</p> <p>a) at the EPA points 15 and 16 identified in P1.4; and</p> <p>b) at the secondary locations EPA points 17 and 18 where a definitive judgement of compliance cannot be made at the primary locations or the noise limits at EPA Points 15 or 16 are exceeded; and</p> <p>c) occur every quarter in a reporting period; and</p> <p>d) occur during one night time period as defined in the Noise Policy for Industry 2017 for a minimum of 15 minutes at each location from a), and when relevant b) during the night.</p>	Section 4.2																

Condition Number	Condition Description	Relevant Section
M6.5	Where required in writing by the EPA, the Licensee must carry out attended monitoring at sensitive receivers in addition the monitoring required by Condition M6.1.	Section 4.2.1
R4.3 Noise Exceedance Reporting	The licensee must report any exceedance of licence noise limits to the EPA Hunter at hunter.region@epa.nsw.gov.au as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.	Section 3.3.1
R5.3 Noise Compliance Assessment Report	The Licensee must provide the EPA with its Annual Return an annual noise compliance assessment report prepared by an appropriately qualified acoustic consultant. The report must include an assessment of any exceedance of noise limits and justification that the noise monitoring points identified in Condition P1.4 are still representative of the sensitive receivers within the noise monitoring groups on Figure 2.	Section 5.1

Accordingly, this Noise Management Plan has been prepared in consultation with the EPA to determine noise limits, monitoring and reporting requirements applied to the EPL that applies to the underground operations (refer to **Section 1.4**).

1.4 Consultation

As per condition 9 (a) of Schedule 3 of PA 08_0101, this Noise Management Plan has been prepared in consultation with the EPA. This included discussions at the EPA offices in Newcastle on 5 October 2016, regarding a variation to the EPL following the sale of the underground and open cut operations and the subsequent split of the project approvals. A noise monitoring program for Integra Underground was agreed to, and is as presented in this Noise Management Plan (refer to **Section 4**). This Noise Management Plan is reflective of the updated EPL 3390. Documentation of correspondence with the EPA is provided in **Appendix A**.

In addition, this Noise Management Plan has been prepared in consultation with the owners of nearby mines (including Ashton, Rix's Creek North, Rix's Creek and the Mt Owen Complex (also a Glencore owned operation)) to ensure that cumulative noise impacts of the mines were adequately considered. Correspondence with these surrounding mines is included in **Appendix B**.

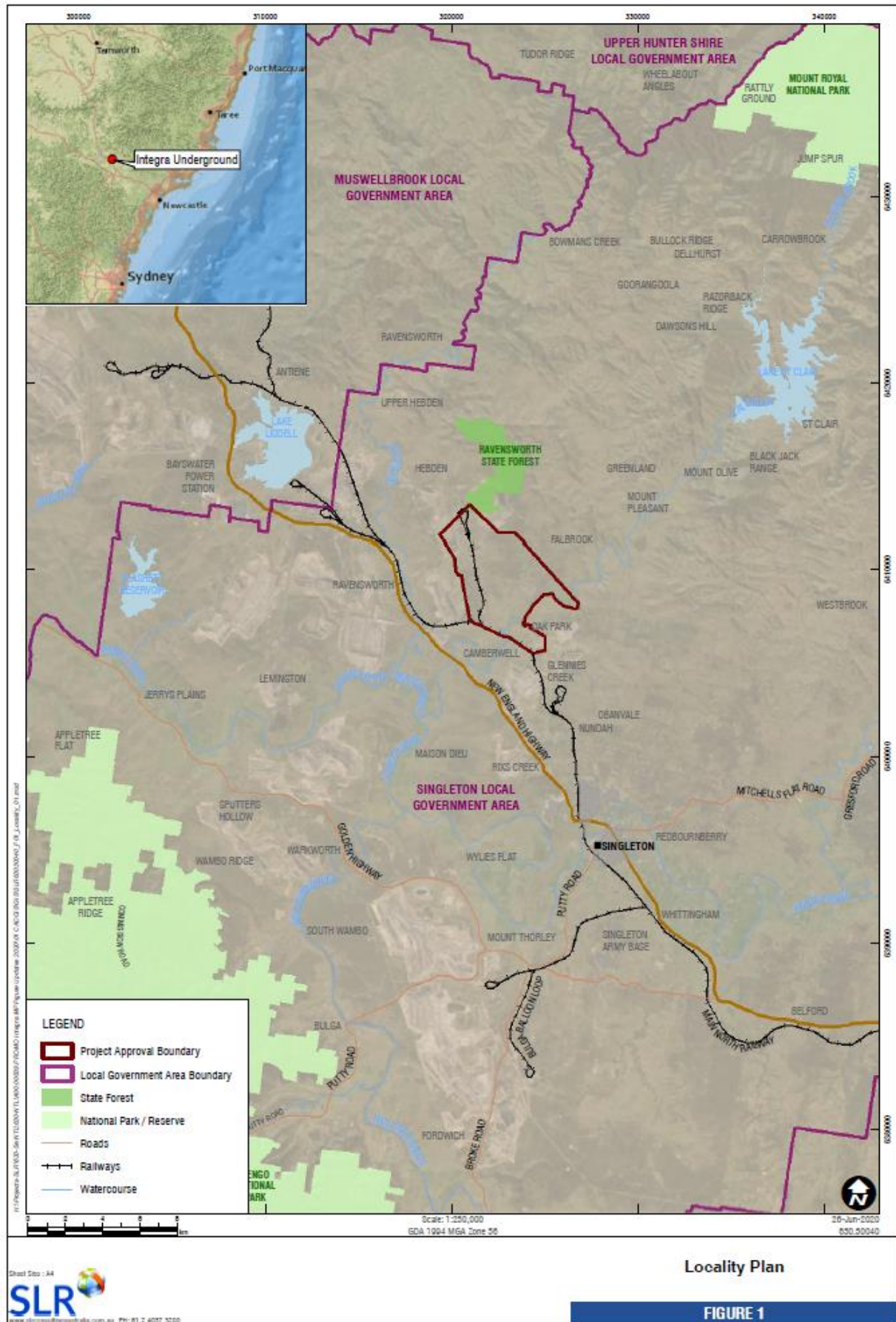
Sources of noise emissions (and hence contribution to cumulative impacts) at Integra Underground are limited due to the underground nature of the mine, and that the coal handling and preparation plant used to process Integra Underground's coal are within the ownership and control of Bloomfield's open cut operations.

Notwithstanding, to satisfy Condition 8 of Schedule 3 of PA 08_0101, a number of measures are in place to coordinate with nearby mines in relation to managing and minimising noise and air quality impacts. The nearby Mt Owen Complex is also owned and operated by Glencore, and a collaborative relationship has been developed between the two mines to co-ordinate best practice noise management across these sites and minimise cumulative impacts. This includes operating a combined CCC for the two operations, where monitoring data is reported to the CCC members for both sites. Integra Underground also has access to the extensive noise and air quality monitoring network at the Mt Owen Complex.

A communication system developed in consultation with the adjacent Mt Owen open cut mining operation is also in place, whereby Mt Owen notify Integra Underground of their intention to blast.

This Noise Management Plan was reviewed and updated following approval of MOD 8 (see **Section 1**). The *Longwall Extension Modification Environmental Assessment* (Hanson Bailey 2017b) contains details of the consultation undertaken in relation to MOD 8.

A copy of the DPIE (previously DPE) approval of the Noise Management Plan is in **Appendix C**.



2. Noise Sources and Limits

2.1 Baseline Data

The Integra Underground Coal Project Noise Impact Assessment (NIA), which was prepared by ERM (2009), and further summarised in the Integra Underground Coal Project Environmental Assessment (EA), contains a detailed description of the nearest noise sensitive receivers to Integra Underground. A total of 18 Noise Assessment Groups (NAG) were identified, which are groups of residences located within approximately 5 km of Integra Underground. The NAGs are shown on **Figure 2** (refer to **Section 4**).

The 2009 NIA (ERM) was conducted with reference to the Integra Open Cut Coal Project Noise and Vibration Assessment (Heggies, 2009), which included an extensive baseline noise monitoring program to determine background and ambient noise levels at these nearby residences. Further to this, a comprehensive review of background noise levels in the region was undertaken as part of the Heggies (2009) assessment. This detailed level of review was undertaken due to the close proximity of mines in the area, such as Rix's Creek, Glennies Creek, Glendell, Mt Owen, Camberwell and Ravensworth East Mines at the time, as well as the influence of the Main Northern Rail Line and the New England Highway on the ambient noise environment. Based on this analysis, rating background noise levels (RBLs) were adopted in consideration of the above, as presented in **Table 2-1**.

Table 2-1 – Summary of the background noise environment from the 2009 NIA for the Integra Open Cut (Heggies 2009) Environmental Assessment

Noise Assessment Group (NAG)	Background Noise Monitoring Location	Rating Background Level All Noise Sources ^{2,3}			LAeq(period) All Noise Sources			Calculated LAeq(period) Noise Amenity Levels ⁴		
		Day	Evening	Night	Day	Evening	Night	Day	Evening	Night
1	80	30	33	34	50	45	45	46-47	43-45	43-47
2	84	31	34	34	63	62	62	46-54	42-53	42-54
3	87	33	35	35	56	45	48	44-45	41-42	41-42
4	95	34	43	32	49	49	47	45-46	41-42	40-41
5	114	45	41	37	60	56	56	42-54	40-54	38-52
6	131	34	36	33	51	44	43	42-45	38-41	36-40
7	110	40	37	34	64	44	44	44-45	41-42	40-45
8	142	37	37	30	49	44	50	40-40	37-37	35-35
9	143	32	36	34	54	54	51	41-41	38-39	37-37
10	8	31	36	32	46	44	44	41-42	38-39	37-39
11	16	33	38	35	51	49	48	41-43	38-39	36-38
12	54	30	34	30	44	46	46	46-48	41-44	40-42
A	31	31	34	31	53	52	46	43-47	38-45	37-45
B	45	30	32	30	48	47	42	45-45	40-41	40-41
C	64	38	40	41	53	53	46	45-46	41-42	40-41
D	48	32	36	33	54	57	43	45-45	41-41	39-40
F	73	34	35	35	55	49	43	46-51	42-50	41-50
G	82	33	39	35	47	64	48	47	43	43

Note 1: Daytime 7.00 am to 6.00 pm, Evening 6.00 pm to 10.00 pm and Night-time 10.00 pm to 7.00 am.

Note 2: Measured noise levels less than 31 dBA may have a signal to noise ratio less than 5 dBA.

Note 3: The RBLs have been determined from measurements of the existing noise environment (ie not calculated) and therefore, conservatively, do include the likely increase in background noise levels associated with the increasing mining activity in the area.

Note 4: Presents the range of Calculated Approved LAeq(period) Noise Amenity Levels for both non-mine owned and mine owned residences.

Further to the original baseline data presented in the NIA (Heggies 2009), noise monitoring results are also reported in Annual Reviews. The Annual Reviews relevant to the Integra open-cut and underground operations from 2009 to 2014 were reviewed in the preparation of this Noise Management Plan. For all years except 2013 and 2010 noise emissions from underground operations were generally inaudible and within noise limits. In 2010, a pump from underground operations was also audible at some residential locations and caused minor exceedances. There was no attended noise monitoring completed in 2015/16 while the Integra Underground was in care-and-maintenance; however, no complaints were received. Since mining recommenced in February 2017, Integra Underground operations have been inaudible, or audible within noise limits, throughout all monitoring periods. This includes quarterly attended noise monitoring as well as monthly attended noise monitoring during construction activities associated with MOD 8.

2.1.1 Potential Impacts

Key operational activities at Integra Underground include:

- longwall development within the Middle Liddell seam using continuous miners;
- longwall mining within the Middle Liddell seam. The approval for MOD 8 allows mining within LW15 to 20;
- extraction of coal to a maximum of 4.5 Mtpa of ROM coal;
- subsidence monitoring and remediation as per the approved Integra Underground Extraction Plan;
- storage of ROM coal at the pit top and haulage of ROM coal to the Rix's Creek North CHPP;
- operation of workshop and administration areas;
- ventilation and gas management; and
- onsite water management as per the Integra Underground Water Management Plan (WMP).

Due to the underground nature of the mine, generation of noise emissions as a result of Integra Underground's operations will generally be limited to the following sources:

- the ventilation fans, compressors and gas flares ;
- the haulage of coal from the ROM coal stockpile to the project boundary. Bloomfield operations (i.e. Rix's Creek North) hauls the coal to the CHPP on an internal haul road via haul trucks; and
- minor surface activities, including:
 - exploration activities;
 - gas drainage works;
 - ventilation works;
 - minor subsidence remediation works; and
 - construction activities.

Further information about the construction of this ancillary surface infrastructure can be found in the Integra Underground *Exploration Activities and Minor Surface Infrastructure Management Plan* (Refer to: www.glencore.com.au/IntegraUnderground).

The *Longwall Extension Modification Environmental Assessment* (Hansen Bailey 2017b) predicted that both the construction and operational noise associated within this ancillary infrastructure would be

low, and is not expected to significantly increase noise levels generated by Integra Underground as a whole.

2.2 Performance Measures and Criteria

2.2.1 Overview

Measured background and ambient noise levels were used to derive relevant noise criteria for Integra Underground, as per relevant policies and guidelines. The NIA describes this process in detail.

The EA provides specific noise criteria for each Noise Assessment Group (NAG). These are for the day, evening and night time periods. The purpose of these noise criteria is to limit intrusive noise impacts from Integra Underground at noise sensitive receivers and protect the amenity of noise sensitive receivers.

2.2.2 Project Specific Noise Criteria

The project specific noise criteria are detailed in Schedule 3, Condition 2, Table 2 of PA 08_0101 and Condition L2.1 of EPL 3390. They are reproduced below in **Table 2–2**.

Table 2–2 – Project Specific Noise Criteria (dB (A))

Location		Day LAeq(15min)	Evening LAeq(15min)	Night LAeq(15min)	Night LA1(1min)
NAG 1 *	All privately-owned land	38	38	36	46
NAG 2 *	All privately-owned land	39	39	37	47
NAG 3	87	42	42	42	49
	106	39	39	39	49
	All other privately-owned land	40	40	39	49
NAG 4	88, 91, 95, 99, 100, 105, 161	35	35	35	47
	All other privately-owned land	42	42	37	47
NAG 5	111	37	37	37	52
	112	36	36	36	52
	118	39	39	39	52
	154	36	36	36	52
	103, 104, 121, 139	35	35	35	52
	All other privately-owned land	50	46	42	52
NAG 6	132, 133, 137	35	35	35	48
	All other privately-owned land	41	41	38	48
NAG 7	110	38	38	38	49
	All other privately-owned land	41	41	38	48
NAG 8 *	142	35	35	35	45
	All other privately-owned land	42	42	35	45
NAG 9 *	2, 3, 4, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152	35	35	35	48
	All other privately-owned land	40	40	38	48
NAG 10 *	10	42	42	42	47

Location		Day	Evening	Night	Night
		LAeq(15min)	LAeq(15min)	LAeq(15min)	LA1(1min)
	9	41	41	41	47
	11, 13	40	40	40	47
	8	38	38	38	47
	6	36	36	36	47
	5	35	35	35	47

* NAG1, 2, 8, 9 or 10 are not included as noise limit locations within the EPL. They are however included as noise limit locations within PA 08_0101

Noise emissions from Integra Underground must not exceed the project specific noise criteria in **Table 2–2** at any residence on privately owned land or on more than 25 percent of any privately owned land.

2.2.3 Noise Acquisition Criteria

Schedule 3, Condition 3, Table 3 of PA 08_0101 details the acquisition noise criteria for Integra Underground. This is reproduced below in **Table 2–3**.

Table 2–3 – Noise Acquisition Criteria (dB (A))

Location	Day	Evening	Night
	LAeq(15min)	LAeq(15min)	LAeq(15min)
All privately-owned land in NAG 1	44	44	42
All privately-owned land in NAG 2	45	45	43
All privately-owned land in NAG 3	46	46	45
All privately-owned land in NAG 4	48	48	43
All privately-owned land in NAG 5	56	52	48
All privately-owned land in NAG 6	47	47	44
All privately-owned land in NAG 7	51	48	45
All privately-owned land in NAG 8	48	48	41
All privately-owned land in NAG 9	46	46	44
All privately-owned land in NAG 10	45	45	43
All privately-owned land in NAG 11	47	47	45
All privately-owned land in NAG 12	44	44	41
All privately-owned land in NAG A	45	45	42
All privately-owned land in NAG B	43	43	41
All privately-owned land in NAG C	43	43	41
All privately-owned land in NAG D	46	46	44
All privately-owned land in NAG F	46	46	46
All privately-owned land in NAG G	47	47	45
All other privately-owned land	41	41	41

If noise emissions from Integra Underground exceed the criteria in **Table 2–3** 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 must acquire the land in accordance with procedures in Conditions 7 and 8 of Schedule 4 of PA 08_0101.

2.2.4 Cumulative Noise Criteria

Schedule 3, Condition 4, Table 4 of PA 08_0101 details the cumulative noise criteria for the Integra Underground. This is reproduced in **Table 2-4**.

Table 2-4 – Cumulative Noise Criteria (dB (A) L_{Aeq} (period))

Location	Day	Evening	Night
NAGs 4, 5, 8 and 9	55	45	40
All other privately-owned land	50	45	40

Integra Underground must implement all reasonable and feasible mitigation measures to ensure that noise emissions from its operations and other surrounding mines do not exceed the criteria provided in **Table 2-4** at any residence on privately owned-land or on more of 25 percent of any privately owned-land.

2.2.5 Construction Noise Criteria

During construction of the additional infrastructure associated with MOD 8, the combined operational and construction noise from Integra Underground will not exceed a level of 5 dB(A) above the daytime operational $L_{Aeq}(15min)$ noise criteria in **Table 2-4** during Standard Construction Hours (7 am to 6 pm, Monday to Friday; and 8 am to 1 pm on Saturdays) or the evening or night time operational $L_{Aeq}(15min)$ noise criteria in **Table 2-3**.

Exceedance of this construction criteria is permissible where an alternative temporary limit has been approved by the Secretary for specific works or where Integra Underground has an agreement with the owner/s of the relevant residence/land to generate higher noise levels and Integra Underground has advised the DPE in writing of the terms of this agreement.

In the event that Integra Underground requires an alternative temporary limit for construction noise, a Construction Work Noise Protocol will be submitted to the Secretary for approval prior to the nominated construction works being undertaken.

Attended monitoring (see **Section 4.2**) will be undertaken at monthly intervals during the construction phase when activities are undertaken during evening or night periods and actual measured levels will be assessed against the “noise affected level” of 40 $L_{Aeq,15min}$, as prescribed by the Interim Construction Noise Guideline (DECC, 2009), rather than against the predicted noise levels.

3. Implementation

This section describes the status of the Statement of Commitments relevant to PA 08_0101 as well as measures to manage Integra Underground's noise emissions. These have been divided into those that aim to prevent incidents in the first place (preventative measure) and those that aim to minimise environmental impacts in the event of a noise exceedance occurring (corrective measures).

3.1 Implementation of Statement of Commitments

Table 1–2 included the commitments made in PA 08_0101 relevant to this NMP. **Table 3-1** details how the actions are implemented at Integra Underground.

Table 3–1 – Implementation of PA 08_0101 Statement of Commitments

Existing or Proposed Actions	Implementation
Use of conveyors instead of haul roads where approved.	This has been investigated. Conveyors are utilised to transport coal to ROM stockpile. Bloomfield operations (i.e. Rix's Creek North) haul the ROM coal to the CHPP on an internal haul road via haul trucks.
Construction of acoustic bunds adjacent to haul roads where recommended by an acoustic consultant.	This has been investigated. Conveyors are utilised to transport coal to ROM stockpile. Bloomfield operations (i.e. Rix's Creek North) haul the ROM coal to the CHPP on an internal haul road via haul trucks.
Use of routine monitoring results to refine on-site noise mitigation and operating procedures	Addressed in Section 3.3 and 5.3.
Undertake noise audits at boundary positions to static sources to verify potential change in overall sound emissions.	Annual sound power testing of static sources (specifically ventilations fans) will be completed to measure noise levels from static sources and identify any significant deviation in overall sound emissions.
Undertake regular discussions with potentially affected residents to proactively identify noise related issues of concern.	Integra Underground implements a stakeholder consultation process.
Undertake quarterly monitoring at identified representative receivers.	Addressed in Section 4.2.
Implement acoustic mitigation at residences where exceedances of the project specific criteria are demonstrated via the monitoring program and requested by the landowner.	Addressed in Section 4.4.
Consideration of negotiated agreements with landowners where exceedances of the project specific criteria are substantiated by monitoring.	Addressed in Section 4.4
Informing residents that the existing community information line for Integra Underground would apply to this proposal.	Complete. Integra Underground continues to operate the community information line.
Existing and/or additional real time noise monitoring will be utilised to manage, assess and control potential emissions from site.	Section 4.3

3.2 Preventative Measures

3.2.1 Operational controls

Integra Underground is committed to implementing and/or maintaining the following operational controls to minimise noise generation:

- most operations are below the ground surface or in the portal;
- significant distance between residences and ventilation fan sites;
- controlling mine noise at the source through the use of equipment with appropriate sound attenuation fitted and maintained, where practical;
- sound power level testing upon procurement of relevant plant and equipment and annual sound power level testing to ensure ongoing compliance with relevant sound power level specifications;
- restricting operations where possible in elevated/out of portal areas, especially during the night time and adverse meteorological conditions;
- where practicable, evening and night-time surface operations will be restricted to areas that support a minimisation of mine contributed noise at privately owned residences surrounding Integra Underground; and
- using broadband reversing alarms on mine equipment, light vehicles and contract vehicles.

3.2.2 Cumulative Noise Management

To satisfy Condition 9(e) of Schedule 3 of PA 08_0102, Integra Underground has prepared a protocol in consultation with Ashton, Rix's Creek, Mt Owen and Glendell to minimise cumulative noise impacts of the mines. This includes a quarterly meeting with environment & community representatives of all of the mines.

3.3 Corrective Measures

3.3.1 Attended Monitoring Exceedance – Suitable Meteorological Conditions

This response plan is implemented if a noise exceedance is measured when noise limits are applicable. A noise exceedance occurs when the measured noise contribution from Integra Underground operations alone is greater than the noise limits specified in **Section 2.2.2** and is applicable when the meteorological conditions are as described Appendix 5 (Note: Temperature inversion conditions are determined based on the INP, namely the sigma-theta method).

If noise levels are determined to be above the relevant noise criteria the following noise management steps are to be followed:

- contact the mining supervisor (or control room if supervisor cannot be contacted) and advise of site contribution, the plant and equipment causing the noise exceedance (if possible) and meteorological conditions;
- obtain advice from mining supervisor on proposed changes to be implemented and timeframes;
- as soon as practical, conduct a follow-up measurement once changes are in effect to quantify changes in site noise;

- advise mining supervisor of results. If the second reading again exceeds the performance criteria the consultant will record that the site has exceeded noise criteria. Additional noise monitoring is to be conducted at the location within one week;
- notify DPIE and EPA of the exceedance in accordance with PA 08_0101 and EPL 3390.

3.3.2 Attended Monitoring Exceedance – Unsuitable Meteorological conditions

This response plan is implemented when an exceedance is measured and noise limits are not applicable due to meteorological conditions (refer to Appendix 5 of PA 08_0101 and note temperature inversion conditions are determined based on the INP, namely the sigma-theta method). If noise levels are determined to be above the relevant noise criteria during unsuitable meteorological conditions the following noise management steps are to be followed:

- contact the mining supervisor (or control room if supervisor cannot be contacted) and advise of site contribution, the plant and equipment causing the noise exceedance (if possible) and meteorological conditions;
- mining supervisor implements changes to the minimise noise from operations, including restricting the operation of the noisy plant and equipment identified by the attended monitoring operator (if identified).

3.3.3 Cumulative Noise Trigger Action Plan

If attended monitoring indicates an exceedance of the cumulative noise criteria required under Schedule 3, Condition 4 of PA 08_0101 the following steps will be followed:

- noise levels will be analysed and investigated to determine the Integra Underground contribution to total mine noise;
- Integra Underground will inform neighbouring mining operations of the investigation and its outcomes; and
- when noise sources contributing to the exceedance include Integra Underground actions will be implemented as described in Section 3.3.1 of this NMP.

3.4 Training and Communication

Generic induction training is provided to all employees and contractors through the GCAA *Generic Surface Induction* and the *Site Familiarisation*. This induction training includes a discussion of the Environmental Management Plans in place at Integra Underground, including the NMP.

From time to time, workforce communication days and toolbox talks allow for discussion of the objectives and requirements of this and any other relevant Plans.

3.5 Best Practice Management

Management practices will be reviewed annually as part of the Environment and Community Broad Brush Risk Assessment to ensure that current practices align with contemporary best practice standards. These actions will be documented and their implementation monitored. Integra Underground will maintain awareness of new technologies for noise mitigation through GCAA participation in relevant industry groups. Integra Underground will implement noise mitigation measures in line with industry best practice mine noise management where reasonable and feasible to do so.

4. Measurement and Evaluation

4.1 Noise Monitoring

Noise emissions from underground mining operations have generally been found, over several years, to be negligible in comparison to open cut operations. Nonetheless, noise levels at strategic noise sensitive locations around Integra Underground will be measured by attended monitoring at quarterly intervals.

Attended monitoring is the preferred methodology for determining compliance with prescribed noise limits, as it allows an accurate determination of the noise contributions from Integra Underground. Furthermore, given the nature of underground operations, the related surface activities and their location relative to the neighbouring open cut mine, unattended monitoring in this specific situation is not likely to yield further useful information for the on-going management of underground related operations.

Notwithstanding, the neighbouring Glencore Mt Owen Complex operates an extensive real-time noise monitoring network, which also surrounds the Integra Underground operations. This network is shown in **Figure 2** and Integra Underground will access this data to supplement the attended noise monitoring program.

4.2 Attended Noise Monitoring

4.2.1 Overview

Quarterly night-time attended monitoring is required to assess compliance with regulatory limits defined within PA 08_0101 and EPL 3390. Monitoring will be undertaken at locations representative of the NAGs in **Table 2-2** and are consistent with EPL requirements for NAGs 3 to 7. The noise monitoring points (NMP) are shown in **Figure 2**.

In 2020, the noise monitoring points were reviewed following a request by the EPA for a report prepared by an appropriately qualified and experience acoustic consultant. The report was prepared by Umwelt (2020) and included justification that attended noise monitoring at the proposed NMPs would represent receivers in NAGs 3 to 7. There were two proposed NMPs – NMP 3 and NMP 7, which are primary NMP. Further, there were two supplementary NMPs – NMP 4 and NMP 6, which are supplementary to NMP 3 and NMP 7, respectively. These proposed NMPs were included in EPL 3390 as part of Variation Notice 1588229. Subsequently, this Noise Management Plan was revised to reflect the noise monitoring points presented by Umwelt (2020).

Attended monitoring will be undertaken at monthly intervals during the construction phase and actual measured levels will be assessed against the “noise affected level” of 40 LAeq,15min, as prescribed by the Interim Construction Noise Guideline (DECC, 2009) (ICNG), rather than against the predicted noise levels.

Where required in writing by the EPA, the Licensee will carry out attended monitoring at sensitive receivers in addition the monitoring required by EPL 3390.

4.2.2 Noise monitoring standards

Noise monitoring will be undertaken in accordance with PA 08_0101, EPL 3390 and relevant Australian Standards and EPA guidelines including:

- AS 1055.1-1997 Acoustics - Description and measurement of environmental noise – General procedures;
- AS IEC 61672.1-2004 Electroacoustics - Sound level meters – Specifications;
- NSW EPA (2014) Discussion Paper – Validation of Inversion Strength Estimation Method;
- NSW Industrial Noise Policy (EPA 2000); and
- Noise Policy for Industry (EPA 2017).

The NSW *Industrial Noise Policy* (EPA 2000) will continue to apply as it referenced in PA 08_0101, except for the NSW Industrial Noise Policy Section 4 modifying factors, which has been transitioned to the *Noise Policy for Industry* (EPA 2017) Fact Sheet C through a NSW Industrial Noise Policy application note.

All acoustic instrumentation used for monitoring under the noise monitoring program will have current NATA or manufacturer calibration certificates. Calibration and associated certificates will be maintained on site and/or by the relevant acoustic consultant.

4.2.3 Method

Attended monitoring will be conducted in accordance with the Industrial Noise Policy (INP) (NSW EPA 2000) (as amended from time to time, or an equivalent NSW Government noise policy) and Australian Standard AS 1055 ‘Acoustics, Description and Measurement of Environmental Noise’. The attended monitoring program is used to:

- determine the individual noise sources contributing to the ambient noise environment, including noise emissions from other mines;
- estimate the contribution from Integra Underground noise sources to the measured noise levels;
- determine whether a modifying factor should be applied to the contributing mine noise levels;
- gain an understanding of the effects of meteorological conditions on the propagation of the noise from Integra Underground to the monitoring location; and
- determine whether noise emissions from Integra Underground comply with relevant noise limits at each attended monitoring location.

The relevant procedures and exemptions (including certain meteorological conditions) of the INP include the assessment of modifying factors from Fact Sheet C of the Noise Policy for Industry. Where applicable, tonality and low frequency noise are to be assessed by analysis of the measured LAeq and LReq spectrum.

For each measurement the following information must be recorded:

- operators name;
- monitoring location;
- dates and times that monitoring began and ended at each location;
- height of the microphone above the ground and, if relevant, distances to building facades or property boundaries;
- qualitative/quantitative meteorological data such as temperature, wind speed, wind direction, cloud cover, humidity, fog, rainfall etc;
- instrument calibration details before and after measurement;
- the LA_{eq15} minute noise level for the measurement period;
- statistical noise level descriptors over the measurement period, LA_{min} , LA_{90} , LA_{10} , LA_1 , and LA_{max} ;
- LA_1 , 1 minute noise levels (to allow comparison with sleep disturbance criteria);
- notes that identify the noise source/s that contribute to peak noise levels (LA_1 or LA_{max});
- an estimate of noise contribution from operations at Integra Underground;
- an estimate of the noise contribution from other audible mines, if any;
- measurement of C-weighted and A-weighted level to assess low frequency noise in accordance with Section 4 of the INP (a 5 dB correction is applicable if the difference between the site's C-weighted and A-weighted level is 15 dB or more);
- data suitable for assessing the relative contribution of mine-generated noise to the overall noise being measured by using a low-pass (i.e. consideration of frequencies up to and including 630 Hz); and
- recommendations and comments where considered appropriate.

4.2.4 Meteorological Monitoring

Meteorological monitoring data will be collected from the Glendell weather station (see **Figure 2**) during attended noise monitoring. In addition, the wind speed at the microphone height will be collected at the attended noise monitoring locations. The Glendell weather station meets the requirements of Condition 16, Schedule 3 of PA 08_0101 Temperature inversion conditions are determined based on the INP, namely the Sigma-theta method.

The meteorological data recorded by the Glendell weather station includes:

- wind speed, wind direction and sigma-theta at 10 m above ground level;
- temperature at 10 m above the ground;
- relative humidity; and
- rainfall.

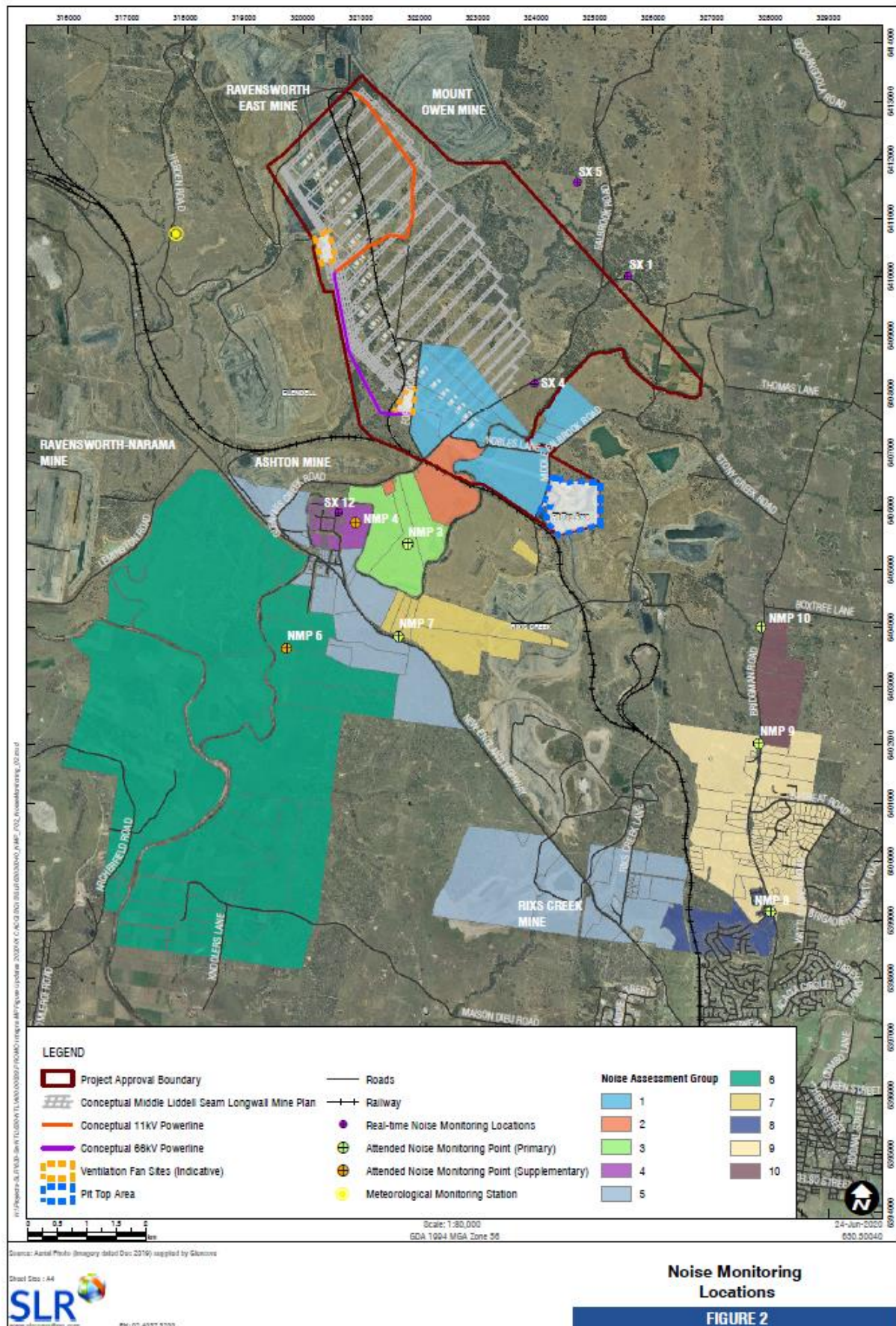
The forecast will be checked by those conducting the attended monitoring to ensure that, when possible, attended monitoring coincides with meteorological conditions such that noise limits would apply.

4.3 Unattended Noise Monitoring

Within Schedule 3, Condition 8 of PA 08_0101, there is a requirement for Integra Underground to operate a comprehensive noise management system that uses a combination of meteorological forecasting and real-time noise monitoring data to guide mining operations and the implementation of both proactive and reactive mitigation measures to ensure compliance with the relevant conditions of the approval.

Integra Underground will monitor its noise emissions through real-time unattended monitoring stations at the nearby Glencore Mt Owen Complex and will also monitor meteorological conditions through the Glendell meteorological monitoring station. These locations are shown in **Figure 2**.

As described above, Integra Underground will actively manage its noise emissions based on results of operator-attended noise monitoring.



4.4 Community Complaints

All community complaints for Integra Underground will be managed in accordance with the Integra Underground Environmental Management Strategy.

Integra Underground will liaise with surrounding mines where applicable, such as the adjoining open cuts of the Mt Owen Complex, Rix's Creek North, Rix's Creek and Aston to determine the source of the noise. All actions (and operational details both before and after changes) will be logged and reported as per internal reporting procedures.

In the event that a community complaint is received regarding current operations, and noise levels are found to be greater than allowable from targeted attended monitoring Integra Underground will alter operations until compliance is achieved.

In the event of a community complaint about previous operations, all relevant information pertaining to the time of alleged noise nuisance is to be gathered as follows:

- locations and quantities of mining plant operational;
- meteorological conditions;
- noise monitoring data from targeted attended monitoring;
- the date and time the complaint was logged;
- nature of the complaint;
- action taken regarding the complaint, or if no action was taken, the reason why; and
- details of follow up contact with the complainant.

A summary of complaints will be published on the Integra Underground website and provided in the Integra Underground Annual Review.

Responses to complaints can include an Independent Review, as described in Conditions 4 to 6, Schedule 4 of PA 08_0101 (subject to DPE direction) if requested by an owner of private land.

In accordance with Condition 6, Schedule 3 of PA 08_0101, noise mitigation measures will be implemented at any residence listed in Tables 1 and 6 of Schedule 3 of PA 08_0101, if requested by an owner in writing to Integra Underground. The cost of this may be borne entirely by Integra Underground, or cumulatively, as described in Condition 7, Schedule 3 of PA 08_0101.

In the event of exceedances of noise criteria being substantiated by monitoring, Integra Underground will consider entering negotiated agreement with the relevant landowners.

4.4.1 Targeted Attended Monitoring

In the event of a complaint, targeted monitoring using a calibrated hand held monitor may be utilised to provide more information to the noise environment. Targeted monitoring may be undertaken by trained mine personnel or undertaken by the appropriately qualified acoustic consultants. Results from this monitoring will be provided back to site and if during this monitoring there is an exceedance of criteria, then the same response as per regular attended monitoring will be followed.

5. Review and Improvement

5.1 Reporting

Attended monitoring reports will include a description of the attended monitoring method and comparison to the criteria detailed in PA 08_0101. All attended measurement results analyses will consider criteria applicability (for impact, mitigation, cumulative and acquisition criteria) with regard to wind speed and vertical temperature gradient, as well as any discrepancies between the predicted and actual impacts of Integra Underground and their cause.

The cause and magnitude of any non-compliance will be identified and described. The actions taken to handle the non-compliance should also be described, and mitigation methods recommended.

A summary of all attended monitoring reports required by PA 08_0101 and EPL 3390 will be included in the Integra Underground Annual Review.

An annual noise compliance assessment report will be prepared and submitted to the EPA in accordance with EPL 3390.

5.2 Contingency Plan

Corrective measures to manage any unpredicted impacts and their consequences are provided in **Section 3.2**.

5.3 Plan Review

This Noise Management Plan will be reviewed (and revised if necessary) in accordance with the requirements of Schedule 5 Condition 6 of PA 08_0101. The monitoring data will be reviewed as collected and at strategic milestones in the mine life, including Annual Review reporting periods. The Noise Management Plan will be modified as required to reflect changes to the mine plans, monitoring results, or in response to stakeholder comments. Any modifications will be made only after approval by DPIE.

6. Accountabilities

The general roles and responsibilities of staff at Integra Underground in respect of this Noise Management Plan are presented in **Table 6-1**.

Table 6-1 – Roles and responsibilities

Role	Accountabilities for this document
Operations Manager	<ul style="list-style-type: none"> ● Provide adequate resources for the implementation of this management plan.
Environment and Community Manager or delegate	<ul style="list-style-type: none"> ● Maintain a high level of understanding of this Plan; ● Assist in the implementation of this Plan in daily operations of the site; ● Liaise with relevant internal and external stakeholders in relation to noise; ● Inform the relevant Integra Underground personnel of potential adverse noise impact issues; ● Maintain an environmental monitoring program to quantify Integra Underground's effect on the local acoustic environment; ● Prepare the required internal and external environmental reports detailing the results for each monitoring location; ● Respond to any unplanned events that may potentially result in, or cause, negative environmental impacts; ● Notify relevant authorities of incidents and non-compliances when required; ● Review the Plan in line with PA 08_0101 and operation changes; ● Implement training relevant to this management plan.
All Managers	<ul style="list-style-type: none"> ● Maintain accountability for the overall environmental performance of Integra Underground, including the procedures and outcomes of this NMP; ● Respond to any unplanned adverse noise impacts that may potentially result in, or cause, negative environmental impacts; ● Ensure reportable incidents are investigated and reported to the Environment and Community team; ● Ensure response to alarms and complaints is undertaken in accordance with this Plan; and ● Check that persons conducting response to alarms and complaints are appropriately trained; understand their obligations and the specific requirements of this Plan.
All personnel	<ul style="list-style-type: none"> ● Comply with all requirements of this management plan.

7. Document Information

Relevant legislation, standards and other reference information will be regularly reviewed and monitored for updates and will be included in any future revisions to this Noise Management Plan.

Related documents listed in **Section 7.1** below provide the linkage and source to develop and maintain compliance information relevant to the NMP.

7.1 Related Documents

Related documents, listed in **Table 7-1** below, are documents directly related to or referenced from this document. Internal procedures have not been reviewed or endorsed by DPE and Glencore is responsible for verifying these procedures are in accordance with this management plan and generally in accordance with PA 08_0101.

Table 7-1 – Related documents

Number	Title
Integra Underground	
INTUG – 793190785-45	Environmental Management Strategy
INTUG – 793190785-49	Exploration Activities and Minor Surface Infrastructure Management Plan

7.2 Reference Information

Reference information, listed in **Table 7-2** below, is information that is directly related to the development of this document or referenced from within this document.

Table 7-2 – Reference information

Reference	Title
NSW EPA 2000	<i>Industrial Noise Policy</i>
DECC, 2009	<i>Interim Construction Noise Guideline</i>
NSW EPA 2017	<i>Noise Policy for Industry</i>
AS 1055	<i>Acoustics, Description and Measurement of Environmental Noise</i>
ERM (2009)	<i>Noise Impact Assessment: Integra Underground Coal Project</i>
Hansen Bailey (2017a)	<i>Integra to Mt Owen Complex Water Pipeline Modification EA for Glencore Coal Pty Ltd</i>
Hansen Bailey (2017b)	<i>Integra Underground Mine Longwall Extension Modification Environmental Assessment for HV Coking Coal Pty Ltd</i>
Hansen Bailey (2018)	<i>Integra Underground Mine Longwall Extension Modification Response to Submissions for HV Coking Coal Pty Limited</i>
Umwelt (2020)	<i>Review of EPL Noise Monitoring Points</i>

7.3 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 Error! Reference source not found. below.

Table 7-3 – Change information

Version	Date	Review team (consultation)	Change Summary
1.0	February 2017	Mark Robinson (Integra Underground) Chloe Piggford (Integra Underground) Katie Teyhan (EMM)	New document for IUG
2.0	September 2017	Chloe Piggford (Integra Underground)	Update to reflect Modification 7 of Project Approval in line with Schedule 5, Condition 6 of PA 08_0101.
3.0	September 2018	Sophie Nicholas and Chris Jones (SLR) Chloe Piggford (Integra Underground)	Update to reflect Modification 8 of PA 08_0101
3.1	July 2019	Keith Simkin (Integra Underground)	Update to attended noise monitoring for construction activities and cumulative noise management.
4.0	June 2020	Chloe Piggford (Integra Underground)	Changes to attended noise monitoring locations. Administrative changes, including transfer to new document template.

Appendix A - External Consultation Records

From: Natasha Ryan <Natasha.Ryan@epa.nsw.gov.au>
Sent: Tuesday, 15 November 2016 10:34 AM
To: Robinson, Mark (Integra Underground - AU)
Cc: Michael Howat
Subject: Integra Underground Management Plans

Dear Mr Robinson

Reference is made to your email dated 8 November 2016 in respect of HV Coking Coal Pty Limited (wholly owned by Glencore) recommencement of mining operations at Integra Underground (Integra) and to the management plans titled:

- *Integra Underground Glencore Noise Management Plan dated 3 November 2016;*
- *Integra Underground Glencore Air Quality and Greenhouse Gas Management Plan dated 3 November 2016;*
and
- *Integra Underground Glencore Water Management Plan dated 3 November 2016, prepared by Glencore.*

The Environment Protection Authority (EPA) encourages the development of such plans to ensure that proponents have met their statutory obligations and designated environmental objectives. However, EPA does not review these documents as our role is to set environmental objectives for environmental/conservation management, not to be directly involved in the development of strategies to achieve those objectives.

The EPA has not reviewed these reports and accordingly offers no comments in relation to

them. If you wish to discuss the matter further please contact Michael Howat on 02 49086819.

Yours sincerely

Natasha Ryan

A/Head Regional Operations - Hunter

North Branch, NSW Environment Protection Authority
+61 2 49086833

natasha.ryan@epa.nsw.gov.au www.epa.nsw.gov.au [@EPANSW](https://twitter.com/EPANSW)

Report pollution and environmental incidents 131 555 (NSW only) or +61 2 9995 5555



If you are sending a non compliance report or official report please send all correspondence to hunter.region@epa.nsw.gov.au
attention: Natasha Ryan

From: Mark.Robinson@glencore.com.au [<mailto:Mark.Robinson@glencore.com.au>]
Sent: Tuesday, 15 November 2016 9:59 AM
To: Natasha Ryan <Natasha.Ryan@epa.nsw.gov.au>
Cc: Michael Howat <Michael.Howat@epa.nsw.gov.au>; Rebecca Scrivener <Rebecca.Scrivener@epa.nsw.gov.au>
Subject: FW: Integra Underground

Natasha,

Further to my discussions with Michael and Rebecca could you please provide a response to the request to review management plans below?

We are keen to get these MP's to Department of Planning this week so a response today or tomorrow is much appreciated. An email response is OK if that helps timing.

Kind regards

Mark Robinson
*Integra Underground
Glencore*

Telephone: +61 2 65774205
Mobile: 0439 131 585

From: Robinson, Mark (Integra Underground - AU)
Sent: Tuesday, 8 November 2016 4:07 PM
To: 'michael.howat@environment.nsw.gov.au'; Michael.howat@epa.nsw.gov.au
Cc: Watson, John (Hunter Valley - AU); Smith, Kelly (Integra Underground - AU)
Subject: Integra Underground

Michael,

As discussed, HV Coking Coal Pty Limited (wholly owned by Glencore) has recently announced the recommencement of mining operations at Integra Underground (Integra).

The approved management plans for Integra have been updated to account for the change in the ownership and proposed recommencement of operations for the development and extraction of LW13-14 in 2017-2018. Development is planned to commence 1 January 2107 with longwall extraction planned to commence in May 2017.

The updated management plans to be developed in consultation with the EPA under the Integra Project Approval are attached for your departments review i.e.

- Water Management Plan
- Air Quality and Green House Gas Management Plan
- Noise Management Plan

I would be pleased to meet to outline the content of the attached management plans if required and please call if you have any questions.

Integra is seeking feedback on the attached plans as soon as possible so we can send management plans to Department of Planning to obtain approval in November 2016.

Kind regards

Mark Robinson
*Integra Underground
Glencore*

Telephone: +61 2 65774205
Mobile: 0439 131 585



DOC18/416819-07, EF15/21093

HV Coking Coal Pty Limited
PO Box 534
SINGLETON NSW 2330

By email: chloe.piggford@glencore.com.au

Attention: Ms Chloe Piggford

22 June 2018

Integra Draft Management Plans

Dear Ms Piggford,

Reference is made to your email dated 22 June 2018 to the Environment Protection Authority ("EPA") in relation to Integra Undergrounds Environment Management Plans titled:

- Integra Underground Glencore Water Management Plan Doc INTUG-793190785-68;
- Integra Underground Glencore Air Quality and Greenhouse Gas Management Plan Doc INTUG-793190785-48; and
- Integra Underground Glencore Noise Management Plan Doc INTUG-263795162-21.

The EPA encourages the development of such plans to ensure that proponents have met their statutory obligations and designated environmental objectives. However, EPA does not review these documents as our role is to set environmental objectives for environmental/conservation management, not to be directly involved in the development of strategies to achieve those objectives.

The EPA has not reviewed these plans and accordingly offers no comments in relation to it.

If you have any further questions on this issue, please contact me on 02 4908 6833.

A handwritten signature in blue ink, appearing to read "natasha".

Yours sincerely

NATASHA RYAN
Operations Officer - Hunter
Environment Protection Authority

Phone 131 555
Phone 02 4908 6800

Fax 02 4908 6810
TTY 133 677
ABN 43 692 285 758

PO Box 488G
Newcastle
NSW 2300 Australia

117 Bull Street
Newcastle West
NSW 2302 Australia

info@epa.nsw.gov.au
www.epa.nsw.gov.au

Appendix B - Correspondence with Surrounding Mines

INTEGRA UNDERGROUND

GLENCORE

9 February 2017

Ashley McLeod
Operations Manager
Mt Owen Pty Limited
PO Box 320
Singleton NSW 2330

Dear Ashley

Glencore Integra Underground (IUG) is required to prepare a protocol to minimise cumulative noise impacts in accordance with Project Approval 08_0101. This protocol has been developed by considering protocols implemented by other mines in the area. The protocol is provided below.

If attended monitoring indicates an exceedance of the cumulative noise criteria required under Schedule 3, Condition 4 of Project Approval 08_0101 MOD 6 the following steps will be followed:

- Noise levels will be analysed and investigated to determine the IUG contribution to total mine noise;
- IUG will inform neighbouring mining operations of the investigation and its outcomes; and
- When noise sources contributing to the exceedance include IUG, actions will be implemented as described in the IUG Noise Management Plan (Section 3.3.1 – Corrective measures for attended noise monitoring exceedance).

The implementation of these steps is the responsibility of the IUG Environment and Community Manager or delegate.

If you have any queries or concerns, please contact Chloe Piggford, Environment and Community Manager, via email at Chloe.Piggford@glencore.com.au.

Yours sincerely



Peter Ostermann
Operations Manager

PO Box 320, Singleton, NSW 2330
640 Middle Falbrook Road, Glennies Creek, NSW 2330
T + 61 2 6570 0880 F + 61 2 6576 1643 www.glencore.com
HV Coking Coal Pty Ltd ABN 45 605 492 804

INTEGRA UNDERGROUND

GLENCORE

9 February 2017

Garry Bailey
General Manager
The Bloomfield Group – Rix's Creek & Rix's Creek North
PO Box 4
East Maitland NSW 2323

Dear Garry

Glencore Integra Underground (IUG) is required to prepare a protocol to minimise cumulative noise impacts in accordance with Project Approval 08_0101. This protocol has been developed by considering protocols implemented by other mines in the area. The protocol is provided below.

If attended monitoring indicates an exceedance of the cumulative noise criteria required under Schedule 3, Condition 4 of Project Approval 08_0101 MOD 6 the following steps will be followed:

- Noise levels will be analysed and investigated to determine the IUG contribution to total mine noise;
- IUG will inform neighbouring mining operations of the investigation and its outcomes; and
- When noise sources contributing to the exceedance include IUG, actions will be implemented as described in the IUG Noise Management Plan (Section 3.3.1 – Corrective measures for attended noise monitoring exceedance).

The implementation of these steps is the responsibility of the IUG Environment and Community Manager or delegate.

If you have any queries or concerns, please contact Chloe Piggford, Environment and Community Manager, via email at Chloe.Piggford@glencore.com.au.

Yours sincerely



Peter Ostermann
Operations Manager

PO Box 320, Singleton, NSW 2330
640 Middle Falbrook Road, Glennies Creek, NSW 2330
T + 61 2 6570 0880 F + 61 2 6576 1643 www.glencore.com
HV Coking Coal Pty Ltd ABN 45 605 492 804

INTEGRA UNDERGROUND

GLENCORE

9 February 2017

Bill Farnworth
Operations Manager
Ashton Coal Operations Limited
PO Box 699
Singleton NSW 2330

Dear Bill

Glencore Integra Underground (IUG) is required to prepare a protocol to minimise cumulative noise impacts in accordance with Project Approval 08_0101. This protocol has been developed by considering protocols implemented by other mines in the area. The protocol is provided below.

If attended monitoring indicates an exceedance of the cumulative noise criteria required under Schedule 3, Condition 4 of Project Approval 08_0101 MOD 6 the following steps will be followed:

- Noise levels will be analysed and investigated to determine the IUG contribution to total mine noise;
- IUG will inform neighbouring mining operations of the investigation and its outcomes; and
- When noise sources contributing to the exceedance include IUG, actions will be implemented as described in the IUG Noise Management Plan (Section 3.3.1 – Corrective measures for attended noise monitoring exceedance).

The implementation of these steps is the responsibility of the IUG Environment and Community Manager or delegate.

If you have any queries or concerns, please contact Chloe Piggford, Environment and Community Manager, via email at Chloe.Piggford@glencore.com.au.

Yours sincerely



Peter Ostermann
Operations Manager

PO Box 320, Singleton, NSW 2330
640 Middle Falbrook Road, Glennies Creek, NSW 2330
T + 61 2 6570 0880 F + 61 2 6576 1643 www.glencore.com
HV Coking Coal Pty Ltd ABN 45 605 492 804

Appendix C - Noise Management Plan Approval



Planning Services
Resource Assessments
Contact: Matthew Sprott
Phone: 8217 2054
Email: matthew.sprott@planning.nsw.gov.au

Chloe Piggford
Environment and Community Manager
Integra Underground
PO Box 320
Singleton NSW 2330

Dear Ms Piggford

Integra Underground Mine (PA 08_0101) – Management Plans

I refer to your letter of 8 December 2016 requesting the Secretary's approval of a number of management plans required under the conditions of approval for PA 08_0101, prior to the recommencement of operations at the Integra Underground Mine.

The Department notes that Glencore is seeking to pursue the staged recommencement of operations at the mine, commencing with the development of first workings for Longwalls 13-14 in February 2017 and progressing to longwall extraction in May 2017.

The Department has now completed its assessment of the final draft versions of the following management plans submitted via email on 10 February 2017:

- Air Quality and Greenhouse Gas Management Plan (condition 15, Schedule 3);
- Noise Management Plan (condition 9, Schedule 3);
- Biodiversity Management Plan (condition 32, Schedule 3);
- Heritage Management Plans for Aboriginal and non-Aboriginal heritage (condition 33, Schedule 3); and
- Exploration Activities and Minor Surface Infrastructure Management Plan (condition 41, Schedule 3).


The Department is satisfied that the above plans include appropriate management measures and adequately address the requirements of the project approval, for the purposes of developing first workings for Longwalls 13-14 of the Integra Underground Mine. However, the Department considers that these plans would benefit from further refinement to the description of the approved longwall layout, clarification of the flora and fauna species and vegetation communities overlying the project area and additional specificity around the measures that would be implemented through trigger action response plans to address the likely impacts of the development.

Consequently, I wish to advise that the Secretary conditionally approves the above plans for the purposes of developing the first workings for Longwalls 13-14. Glencore is required to consult further with the Department regarding the refinement and subsequent approval of these plans prior to the commencement of longwall extraction at the site.

Please ensure the effective date on the cover page of the above plans is revised to reflect the date of this letter. Once finalised please place a copy of the approved plans on your website.

If you wish to discuss this matter further, please contact Matthew Sprott at the details listed above.

Yours sincerely


Howard Reed 17.2.17
Director Resource Assessments
as the Secretary's nominee

Department of Planning and Environment
Level 22, 320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | T 1300 305 695 | www.planning.nsw.gov.au



Planning &
Environment

Planning Services
Resource Assessments
Contact: Robyn Skinner
Phone: 6575 3409
Email: robyn.skinner@planning.nsw.gov.au

Chloe Piggford
Environment and Community Manager
Integra Underground
PO Box 320
Singleton NSW 2330

Dear Ms Piggford,

Integra Underground Mine (PA 08_0101) – Management Plans

This letter refers to the following management plans for the Integra Underground Project that were submitted to the Department for approval on 27 March 2017:


- Air Quality and Greenhouse Gas Management Plan (condition 15 of Schedule 3);
- Noise Management Plan (condition 9 of Schedule 3); and
- Exploration Activities and Minor Surface Infrastructure Management Plan (condition 41 of Schedule 3).

The Department notes these revised plans were submitted after the Department issued a conditional approval on 17 February 2017. The Department has since reviewed the revised plans and considers they now adequately address the full requirements of the relevant conditions. Consequently, the Secretary approves the above plans dated 27 March 2017.

Once finalised please place a copy of the approved plans on your website and forward a copy to the Department.

If you wish to discuss this matter, please contact Robyn Skinner on 6575 3409.

Yours sincerely,


Howard Reed 28.3.17
Director Resource Assessments
as nominee of the Secretary



Planning &
Environment

Planning Services
Resource Assessments
Contact: Megan Dawson
Phone: 9274 6391
Email: megan.dawson@planning.nsw.gov.au

Ms Chloe Piggford
Environment & Community Manager
Integra Underground
PO Box 320
Singleton NSW 2330

Dear Ms Piggford,

**Integra Underground Mine (PA 08_0101)
Updated Management Plans following Modification 7**

I refer to your correspondence of 26 September 2017, submitting five updated management plans for Integra Underground Mine to the Department for approval. I understand that these plans have been updated to address the new activities and requirements approved under modification 7 on 18 September 2017.

The Department has reviewed the following plans and is satisfied that they meet the relevant requirements under PA 08_0101:

- Noise Management Plan (condition 9 of Schedule 3);
- Water Management Plan (condition 31 of Schedule 3);
- Biodiversity Management Plan (condition 32 of Schedule 3);
- Aboriginal Heritage Management (condition 33 of Schedule 3); and
- Historic Heritage Management (condition 33 of Schedule 3).

Consequently, I wish to advise that the Secretary approves the above plans. Please provide final (untracked) versions of these plans to the Department at your earliest convenience and place a copy of them on your website.

If you wish to discuss this matter further, please contact Megan Dawson on 9274 6391.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'M Sprott'.

28/09/17

Matthew Sprott
A/Director Resource Assessments
as nominee of the Secretary

Department of Planning and Environment
320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | T 1300 305 695 | www.planning.nsw.gov.au



Planning Services
Resource Assessments
Contact: Jack Murphy
Phone: 8217 2016
Email: jack.murphy@planning.nsw.gov.au

Ms Chloe Piggford
Environmental and Community Manager
Integra Underground

Email: chloe.piggford@glencore.com.au

Dear Ms Piggford,

**Integra Underground Project (08_0101)
Environmental Management Plans**

I refer to your email dated 7 September 2018, submitting a revised environmental management strategy and revised environmental management plans for the Integra Underground Project. The Department has reviewed the following documents:

- Heritage Management Plan dated September 2018 (condition 33, Schedule 3);
- Air Quality and Greenhouse Gas Management Plan dated September 2018 (condition 15, Schedule 3);
- Biodiversity Management Plan dated September 2018 (condition 32, Schedule 3);
- Environmental Management Strategy dated September 2018 (condition 1, Schedule 5);
- Water Management Plan dated September 2018 (condition 31, Schedule 3);
- Construction Traffic Management Plan dated September 2018 (condition 42, Schedule 3);
- Noise Management Plan dated September 2018 (condition 9, Schedule 3); and
- Exploration Activities and Minor Surface Infrastructure Management Plan dated September 2018 (condition 41, Schedule 3).

The Secretary has approved the above documents. Please ensure finalised copies of these documents are made available on the company's website.

Should you have any enquiries in relation to this matter, please contact Jack Murphy.

Yours sincerely,

A handwritten signature in blue ink that reads 'Howard Reed'.

Howard Reed 10.9.18
Director
Resource Assessments
as nominee of the Secretary



Planning,
Industry &
Environment

Planning and Assessment
Energy and Resource Assessments
Name: Bailey Williams
Phone: 8275 1306
Email: bailey.williams@planning.nsw.gov.au

Mr Keith Simkin
Environment and Community Manager
Integra Underground – Glencore

By email: keith.simkin@glencore.com.au

Dear Mr Simkin

**Integra Underground Project (MP 08_0101)
Review of Management Plans**

I refer to your email dated 28 June 2019, seeking the Secretary's approval of three updated management plans for the Integra Underground Project (MP 08_0101), including the:

- Air Quality and Greenhouse Gas Management Plan (dated September 2018) (condition 15 of Schedule 3);
- Noise Management Plan (dated September 2018) (condition 9 of Schedule 3); and
- Environmental Management Strategy (dated September 2018) (condition 1 of Schedule 5).

The Department has reviewed these plans and considers that they address the relevant conditions of consent. As such, the Secretary has approved these plans. Please ensure that final untracked copies of these documents are provided to the Department by 1 August 2019 and are uploaded to the company's website.

Should you have any enquiries in relation to this matter, please contact Bailey Williams on the details listed above.

Yours sincerely

Howard Reed *26-7-19*
Director, Resource Assessments
as nominee of the Planning Secretary