

Independent Environmental Audit 2020

Integra Underground Coal Mine



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Quality Information

Document Independent Environmental Audit 2020

Ref 60644547

Date 15-Sep-2021

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Reviewed by Shani Walton

Revision History

Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
0	18-Jan-2021	Draft report internal review	Kelly Pearsall Technical Director - Environment	
1	04-Feb-2021	Draft report issued to client	Kelly Pearsall Technical Director - Environment	
2	17-Feb-2021	Final report issued to client	Shani Walton 2020 IEA Lead Auditor	
3	15-Sep-2021	Final report amended to address the Department's request for additional information	Shani Walton 2020 IEA Lead Auditor	

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Executive Summary

AECOM Australia Pty Ltd (AECOM) was engaged by Integra Underground (Integra UG) to conduct an Independent Environmental Audit (IEA) of the Integra UG Coal Mine located in the Hunter Valley, New South Wales.

The audit was conducted in accordance with Condition 12 and 13 of Schedule 5 of the Integra UG Project Approval (Project Approval (PA) 08_0101) as issued by the Department of Planning, Industry and Environment (the Department) and AECOM's proposal dated 03 September 2020.

The last IEA carried out at the site under PA 08_0101 was conducted for the period of 05 December 2014 to 28 November 2017. The audit period to which this audit applies is inclusive of the period from 29 November 2017 to 03 December 2020 (date of last day of audit site inspection). This report presents the findings of this audit.

The IEA methodology included:

- Initial discussions with Integra UG to organise the audit, including the provision of documentation, the site visit and timing
- Review of documentation provided by Integra UG and preparation of compliance assessment checklists that included a list of conditions of key regulatory approvals to be assessed for compliance
- A three-day site inspection including review of documentation and interviews with key site personnel on 01 to 03 December 2020
- Consultation with key government agencies as presented in this report
- Review of additional documentation provided by Integra UG after the site inspection
- An assessment of environmental management performance through review of the implementation of key environmental management strategies, plans and programs, non-compliances documented in annual reporting, regulatory actions, incidents and complaints
- An assessment of compliance was undertaken for each condition within the selected regulatory approvals based on a review of documentation, observations during site inspections, interviews, implementation of management plans, incidents, complaints and regulatory action
- A review of the adequacy of the environmental management strategies, plans and programs required under the consent
- Submission of a draft audit report to Integra UG to provide an opportunity for additional information and / or correction of fact
- Finalisation of the report.

The IEA identified a total of 9 non-compliances against PA 08_0101, Environmental Protection Licence (EPL) 3390 and coal/mining leases. This included:

- 7 non-compliances identified against conditions of PA 08_0101. These were in relation to the following:
 - Consultation with Subsidence Advisory New South Wales (SANSW) before constructing a new building on site
 - Consultation with required agencies with regards to updates to management plans
 - Collection of depositional dust samples in accordance with monitoring methods specified in relevant Australian Standards
 - Evidence not provided to validate that ecological survey reports were provided to the Department within the required timeframes
 - Implementation of controls stipulated in Ground Disturbance Permits (GDPs).
- 2 non-compliances identified against conditions of EPL 3390. These were in relation to:

- Time not being recorded on sewage treatment maintenance records prior to November 2018
- Noise monitoring records not referencing the name of the person who collected the sample.

A summary of compliance with the approvals, licences and leases assessed as part of this audit is provided in the table below:

Table 1 Summary of Audit Findings

Approval	Total No. of Conditions	Compliant	Non-Compliant	Admin Non Compliance	Not Triggered	Noted
PA 08_0101	238	163	5 – Low Risk	2	64	3
EPL 3390	78	48	0	2	16	12
ML1525	39	23	0	0	14	1
ML1551						
ML1676						
ML1437						
ML1518						
ML1786						
ML1742						
ML1740						
CL382						

Non-compliances identified against relevant approvals are identified and discussed in Section 8.0. A summary of the Integra UG's overall environmental performance is summarised in Section 6.0.

1.0 Definitions

Abbreviation	Description
AHMP	Aboriginal Heritage Management Plan
AECOM	AECOM Australia Pty Ltd
AQGGMP	Air Quality Greenhouse Gas Management Plan
BMP	Biodiversity Management Plan
CCC	Community Consultative Committee
CHPP	Coal Handling Preparation Plant
CL	Coal Lease
CMO	CMO Compliance Management Software
the Council	Singleton Council
CTMP	Construction Traffic Management Plan
the Department	Department of Planning, Industry and Environment
Dol Water	Department of Industry, Water
DRG	Division of Resources and Geoscience, a division of the Department
EA	Environmental Assessment
EAMSIMP	Exploration Activities and Minor Surface Infrastructure Management Plan
EC	Electrical Conductivity
E&C	Environment and Community
EMS	Environmental Management System
EP	Extraction Plan
EPA	NSW Environmental Protection Authority
EPL	Environmental Protection Licence
ERP	Eastern Rail Pit
ESCP	Erosion and Sediment Control Plan
GCAA	Glencore Coal Assets Australia
GDE	Groundwater Dependent Ecosystem
GDP	Ground Disturbance Permit
GWMP	Groundwater Monitoring Program
Ha	Hectare
HHMP	Historic Heritage Management Plan
HMA	Habitat Management Area
HVCC	HV Coking Coal Pty Ltd
ICAM	Incident Cause Analysis Method
IEA	Independent Environmental Audit
Integra UG	Integra Underground
LW	Longwall
INP	Industry Noise Policy

Abbreviation	Description
ML	Mining Lease
MOC	Mount Owen Complex
MOD	Modification
MOP	Mining Operations Plan
Mtpa	Mega Tonnes Per Annum
NAG	Noise Assessment Group
NMP	Noise Management Plan
NRAR	Natural Resources Access Regulator
NSW	New South Wales
OEH	Office of Environment and Heritage
OFI	Opportunity for Improvement
OSMS	On-site Sewage Management System
OWS	Oil Water Separator
PA	Project Approval
RAP	Registered Aboriginal Party
ROM	Run of Mine
RR	Resource Regulator
SANSW	Subsidence Advisory New South Wales
Secretary	Secretary of the Department of Planning, Industry and Environment or delegate
SWB	Site Water Balance
SWMP	Surface Water Monitoring Program
TARP	Trigger Action Response Plan
TP2	Mount Owen Stage 5 Tailings Dam
TSS	Total Suspended Solids
WAL	Water Access Licence
WMP	Water Management Plan

2.0 Introduction

AECOM Australia Pty Ltd (AECOM) was engaged by Integra Underground (Integra UG) to conduct an Independent Environmental Audit (IEA) of the Integra UG Coal Mine located in the Hunter Valley, New South Wales.

The audit was conducted in accordance with Condition 12 and 13 of Schedule 5 of the Integra UG Project Approval (Project Approval (PA) 08_0101) as issued by the Department of Planning, Industry and Environment (the Department) and AECOM proposal dated 03 September 2020.

The last IEA carried out at the site under PA 08_0101 was conducted for the period of 05 December 2014 to 28 November 2017. The audit period to which this audit applies is inclusive of the period from 29 November 2017 to 03 December 2020 (date of last day of audit site inspection). This report presents the findings of this audit.

2.1 Background to the project

Integra UG is an established underground mine located approximately 12 km north-west of Singleton, in the Singleton Local Government Area (LGA). Integra UG 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 UG, which had been placed in care and maintenance in May 2014. Bloomfield Collieries Pty Limited purchased the open cut and surface facilities (re-named the Rix's Creek North Mine).

Mining operations at Integra UG recommenced in 2017, with infrastructure development and early workings resuming in February 2017 and longwall extraction resuming in May 2017. To date, coal has been mined from the Middle Liddell Seam only, despite PA 08_0101 also covering approval to mine the Hebden and Barrett seams.

2.1.1 Approval history

Approval for PA 08_0101 was originally granted on 26 November 2010 when the Integra Underground Complex operated both an underground and open cut mine. PA 08_0101 was initially modified on four occasions, as summarised below:

- **Modification 1** (granted 18 March 2012): Extension of the open cut dump and increase emplacement heights
- **Modification 2** (granted 01 February 2013): Amendments to consent wording
- **Modification 3** (granted 05 October 2012): Extend timeframes for conditions
- **Modification 4** (granted 24 February 2016): Modification to biodiversity areas

Following the separate sale of the underground and open cut mines, the combined project approval PA 08_0101 was modified (modification 5 granted on 23 August 2016) to separate the approvals. Following the separation of the approvals Integra UG operated under PA 08_0101 as modified and has been modified a further three times, as summarised below:

- **Modification 6** (granted on 21 December 2016): Approval to correct an administrative error which unintentionally altered the previously approved mine plan for the project.
- **Modification 7** (granted on 15 September 2017): The modification application was made to facilitate the construction of a water pipeline from Integra UG to the adjacent Mount Owen Complex (MOC) and the subsequent use of the pipeline to transfer mine water. The modification enables surplus mine water collected at Integra UG to be managed at MOC and within Glencore's Greater Ravensworth Area Water Sharing Scheme.
- **Modification 8** (granted 16 April 2018): The purpose of Modification 8 was to seek approval to continue longwall mining of the Middle Liddell Seam further to the north of the previously approved longwall panels, and construction and operation of ancillary surface infrastructure

required to support the proposed mining activities. The construction of these ancillary surface infrastructure commenced in February 2019.

2.1.2 Mining in the audit period

During the audit period the following mining activities occurred in the Middle Liddell Seam:

- Longwall 13: Secondary extraction of Longwall 13 commenced on 23 May 2017, prior to the commencement of the audit period. Longwall 13 completed mining on 10 August 2018
- Longwall 14: Secondary extraction of Longwall 14 commenced mining on 07 September 2018 and finished production on 17 August 2019
- Longwall 15: Secondary extraction of Longwall 15 commenced production on 19 September 2019. Mining of Longwall 15 was completed on 05 May 2020. At completion of mining the total void length for Longwall 15 was 1834m, with a void width of 257m
- Longwall 16: Secondary extraction of Longwall 16 commenced on 09 June 2020. The auditors were informed that the Longwall 16 extraction face was at chainage 725m on 30 November 2020.

2.1.3 Site figures

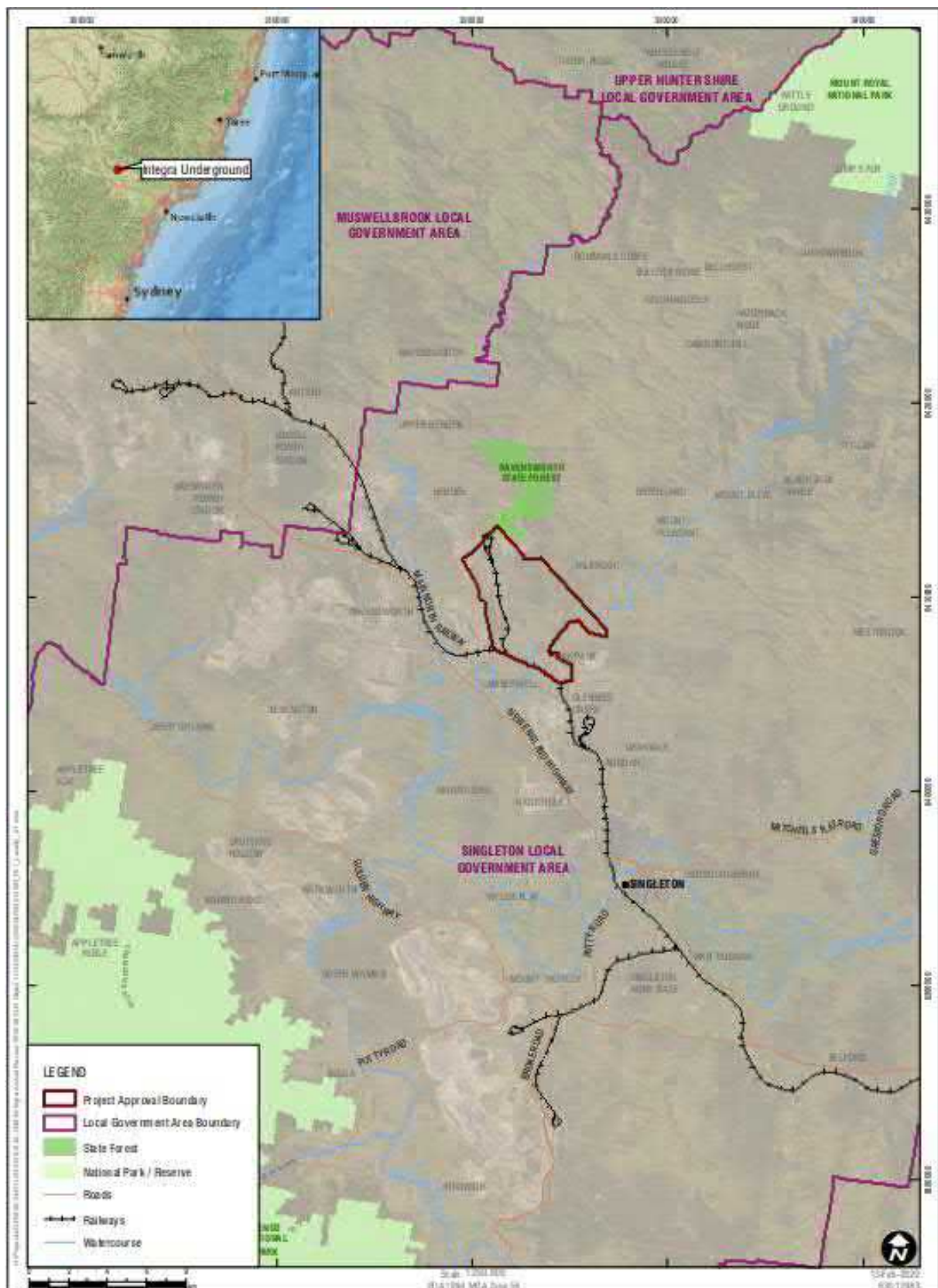


Figure 2-1 Locality Plan

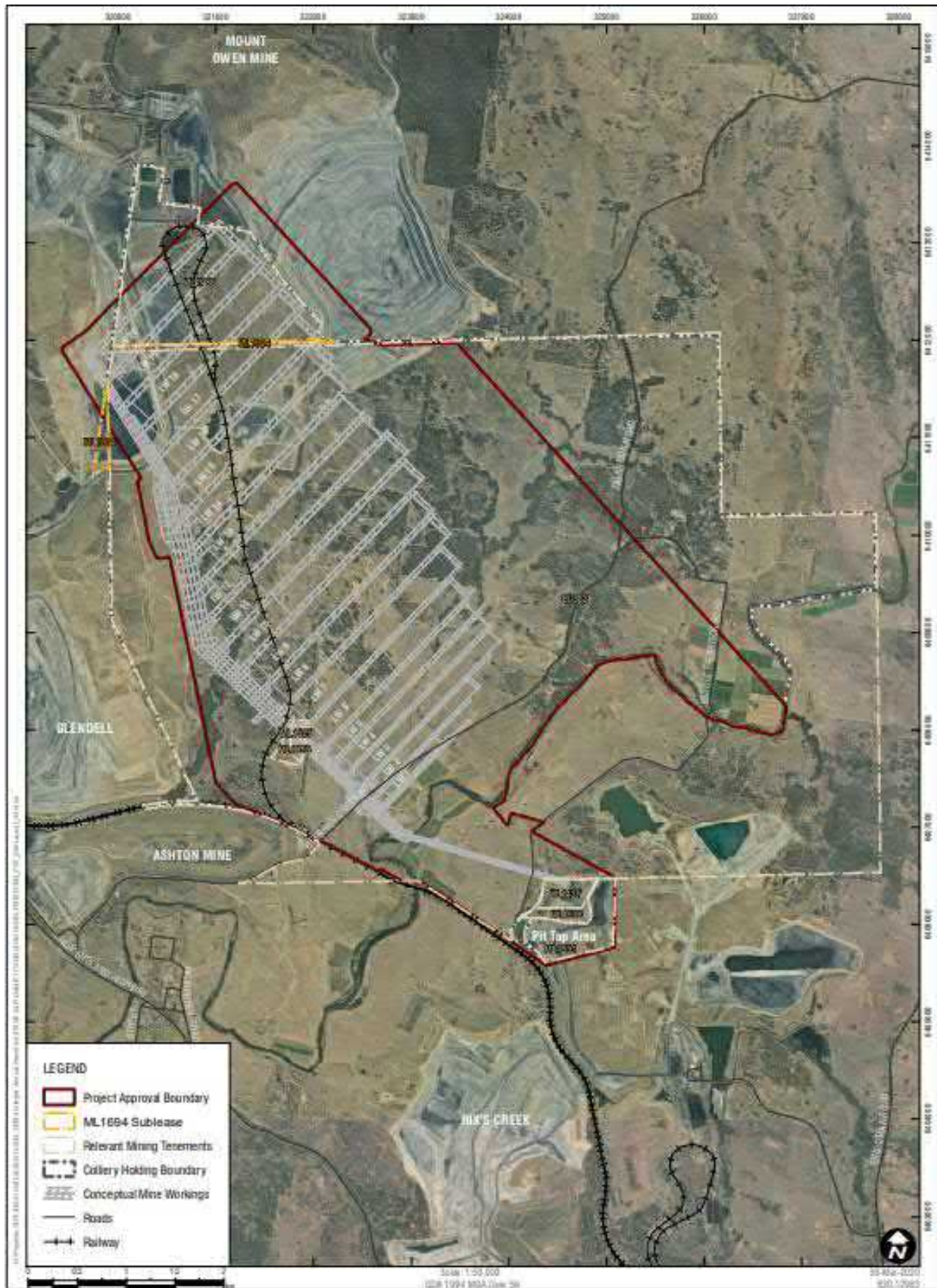


Figure 2-2 Site Layout

2.2 Approvals, Licences and Leases

Table 2 lists the current approvals, licences and leases held for Integra UG. Surface water and ground water licences are summarised in **Table 3** and **Table 4**.

Table 2 Summary of Existing Major Approvals and Licences

Title	Agency	Expiry
Project Approval PA 08_0101	the Department	31 December 2035
EPL 3390	NSW Environment Protection Authority (EPA)	31 August (Anniversary Date)
On-Site Sewerage Management (OSSM) Approval 3969/2008	Singleton Council	30 June 2021
Mining Lease (ML) 1437	the Division of Resources and Geosciences (DRG)	27 March 2032
ML 1518		27 March 2032
ML 1525		17 November 2023
ML 1551		27 March 2032
ML 1676		04 January 2026
ML 1786		31 December 2031
ML 1694		22 October 2035
Coal Lease (CL) 382		01 November 2033

Table 3 Surface Water Licences

Licence No.	Work Approval	Expiry	Share (ML)	Water Source
Water Access Licence (WAL) 484	20CA200060	Perpetuity	3	Hunter Regulated River – Glennies Creek (any part)
WAL 485			99	
WAL960	20WA201234		50	
WAL 961	20WA201236		150	Hunter Regulated River – Zone 3A of Glennies Creek
WAL 1172			3	
WAL 1173	20CA201763		303	
WAL 1242			13	

Table 4 Groundwater Licences

Licence No.	Expiry	Allocation (ML)	Type of Works
20BL169862	25 September 2020	450	
20BL16986			

Licence No.	Expiry	Allocation (ML)	Type of Works
20BL172505	19 May 2021	500	Bore – Groundwater extraction for dewatering purposes
20BL172506			
20BL167917	Perpetuity	N/A	Monitoring Bore
20BL169571			
20BL169573			
20BL169574			
20BL171707			
20BL171708			
20BL171710			
20BL171813			
20BL171870			
20BL172277			
20BL172278			
20BL172279			

2.3 Audit team

The AECOM Auditing Team, inclusive of the required technical specialists, consists of the following personnel:

Table 5 Audit Team

Personnel	Audit Team Role
Shani Walton	Lead Auditor
Kate Michelmores	Auditor
Katherine Hutton	Groundwater Specialist
Amanda Kerr	Surface Water Specialist
Jamie McMahon	Biodiversity Specialist
Henk Buys	Geotechnical Assessment and Subsidence Impacts Specialist
Kelly Pearsall	Independent Verifier

Both the Lead Auditor and Auditor are registered Exemplar Global auditors. In addition, the audit team, inclusive of specialists, was approved by the Department to conduct the audit. Refer to the letter from the Department provided in Appendix A.

2.4 Audit Scope

The requirements for the IEA are set out in Schedule 5, Condition 12 and 13 of Project Approval 08_0101 as detailed in Table 6.

Table 6 Project Approval IEA Condition

Project Approval Condition	Requirement	IEA Reference
PA 08_0101 Schedule 5, Condition 12	By the end of December 2011, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission, commence and pay the full cost of an Independent Environmental Audit of the project. This audit must:	This Report
PA 08_0101 Schedule 5, Condition 12(a)	be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;	Appendix A
PA 08_0101 Schedule 5, Condition 12(b)	include consultation with the relevant agencies;	Section 3.3
PA 08_0101 Schedule 5, Condition 12(c)	assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);	Section 6.0 and Appendix B
PA 08_0101 Schedule 5, Condition 12(d)	review the adequacy of any approved strategies, plans or programs required under these approvals, with particular reference to management practices to ensure that they align with contemporary best practice industry standards;	Section 5.0
PA 08_0101 Schedule 5, Condition 12(e)	recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and	Section 0
PA 08_0101 Schedule 5, Condition 12(f)	be conducted and reported to the satisfaction of the Secretary.	Determined post submission
PA 08_0101 Schedule 5, Condition 12	This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary	Appendix A
PA 08_0101 Schedule 5, Condition 13	Within 12 weeks of commencing each audit, or as otherwise agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of any measures proposed to address the recommendations.	Integra UG is required to submit this report along with responses to recommendations made in this report to the Department.

2.5 Audit Period

The previous IEA was conducted in 2017 for an audit period of 05 December 2014 to 28 November 2017, as such the 2020 IEA is inclusive of the period from the completion date of the last IEA (29 November 2017) to the date of the 2020 audit site inspection (03 December 2020).

3.0 Audit Methodology

The IEA methodology included:

- Pre-audit:
 - Initial discussions with Integra UG to organise the audit, including the provision of documentation, the site visit and timing.
 - Review of documentation provided by Integra UG and their representatives and preparation of compliance assessment checklists that included a list of conditions of key regulatory approvals to be assessed for compliance.
 - Consultation with key government agencies as presented in this report.
- IEA Site Inspection:
 - Three-day site inspection including review of documentation and interviews with key site personnel on 01 to 03 December 2020.
- IEA Reporting:
 - Review of additional documentation provided by Integra UG after the site inspection
 - An assessment of environmental management performance through review of the implementation of key environmental management strategies, plans and programs; non-compliances documented in annual reporting; regulatory actions; incidents; and complaints
 - An assessment of compliance was undertaken for each condition within the selected regulatory approvals based on a review of documentation, observations during site inspections, interviews, implementation of management plans, incidents, complaints and regulatory action
 - A review of the adequacy of the environmental management strategies, plans and programs required under the consent
 - Submission of a draft audit report to Integra UG to provide an opportunity for additional information and / or correction of fact
 - Finalisation of the report.

This report provides a summary of findings including details of non-compliances identified in the audit, and recommended actions to improve compliance status and / or environmental performance.

3.1 Audit Team Approval

The Department approved the appointment of the AECOM audit team on 06 October 2020, refer to Appendix A.

The Department noted that *as per Schedule 5 condition 13 of the approval, within 12 weeks of commencing this audit (i.e. from the date of the first day of the site inspection), or as otherwise agreed with the Secretary, the IEA report and the response to audit recommendations (RAR) are to be submitted to the Department via the Major Project website.*

3.2 Scope Development

The IEA was undertaken in general accordance with:

- The Department's *Post-approval requirements for State Significant Developments Independent Audit Guideline, October 2015* (Independent Audit Guideline, 2015)
- AS/NZS ISO 19011:2014 Guidelines for auditing management systems
- AECOM's proposal (dated 20 December 2018).

The Project Approval does not require Integra UG to follow the 2020 Independent Audit Post Approval Requirements (IA PAR). For existing mining projects, the Integrated Mining Policy documents (including the Independent Audit Guideline (2015)) are still applicable. However, the Department indicated to the Lead Auditor, during consultation, that the compliance status descriptors in the IA PAR are preferred. Therefore this IEA was conducted in accordance with the Project Approval and generally in accordance with Independent Audit Guideline (2015) while utilising the compliance status descriptors in the IA PAR (as outlined in Section 3.5).

3.3 Consultation

Schedule 5, Condition 12(b) of Integra's Project Approval 08_0101 requires the IEA to include consultation with relevant agencies. Table 7 provides a summary of the feedback received from the request made to relevant regulatory agencies on 10 October 2020.

Table 7 Regulator Response Summary

Regulatory Agency	Response Received	Date Received
The Department	Yes	23 October 2020
EPA	No	n/a
Subsidence Advisory NSW (SANSW)	No	n/a
Resource Regulator (RR)	Yes	24 November 2020
Natural Resources Access Regulator (NRAR)	No	n/a
Singleton Council	Yes	23 October 2020
Community Consultative Committee (CCC)	Yes	30 October 2020

Copies of regulator feedback received as well as responses to regulator consultation is provided in Appendix C.

3.4 Site Inspection

A three-day site inspection was conducted at Integra UG between 01 to 03 December 2020. During the site inspection the weather conditions were hot and sunny with the daytime temperature ranging from 20°C in the morning to 42°C in the afternoons. Rainfall in the region had been below average over the 12-24 months prior to the audit.

Photographs from the audit site inspection supporting audit findings are provided in Appendix D.

3.4.1 Opening and Closing Meetings

In accordance with *ISO 19011:2014 Guidelines for auditing management systems* an opening and closing meeting was held during the Site inspection. Details of attendees at both meetings are included in the sign on sheets included in Appendix F.

3.5 Compliance Status

The compliance status was assessed by application of the criteria in accordance with the Independent Audit Guideline (the Department, 2015) provided in Table 8 below.

Table 8 Compliance status descriptors

Status	Description
Compliant	The auditor has collected sufficient verifiable evidence to demonstrate that all elements of the requirement have been complied with within the scope of the audit.

Status	Description
Not verified	Where the auditor has not been able to collect sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory approval have been complied with within the scope of the audit. In the absence of sufficient verification the auditor may in some instances be able to verify by other means (visual inspection, personal communication, etc.) that a requirement has been met. In such a situation, the requirement should still be assessed as not verified. However, the auditor could note in the report that they have no reasons to believe that the operation is non-compliant with that requirement.
Non-compliant	The auditor has determined that one or more specific elements of the conditions or requirements have not been complied with within the scope of the audit.
Administrative non-compliance	A technical non-compliance with a regulatory approval that would not impact on performance and that is considered minor in nature (e.g. report submitted but not on the due date, failed monitor or late monitoring session). This would not apply to performance-related aspects (e.g. exceedance of a noise limit) or where a requirement had not been met at all (e.g. noise management plan not prepared and submitted for approval).
Not triggered	A requirement has an activation or timing trigger that has not been met during the temporal scope of the audit being undertaken (may be a retrospective or future requirement), therefore an assessment of compliance is not relevant.
Observation	Observations are recorded where the audit identified issues of concern which do not strictly relate to the scope of the audit or assessment of compliance. Further observations are considered to be indicators of potential non-compliances or areas where performance may be improved.
Note	A statement or fact, where no assessment of compliance is required.

It is noted that the Department required that the terms partial compliance and partial non-compliance or other similar terms must not be used.

Risk levels for any non-compliances are categorised by one of the following levels outlined in the following table.

Table 9 Compliance status descriptors

Risk Level	Description
High	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-compliance with: - potential for serious environmental consequences, but is unlikely to occur; or - potential for moderate environmental consequences, but is likely to occur
Low	Non-compliance with: - potential for moderate environmental consequences, but is unlikely to occur; or - potential for low environmental consequences, but is likely to occur
Administrative non-compliance	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions).

3.6 Evidence Validation

The auditors undertook verification activities to confirm the reliability of audit evidence. This included interviews, data checking, the examination of records, and site inspections. Records were provided in electronic and/or hard copy by site personnel and additional documents were reviewed whilst on site.

Some aspects of the audit process may have relied on information such as judgements and assumptions where external supporting evidence was unavailable or limited. Where this information was considered, its validity was confirmed to the extent possible prior to use by the auditors and is noted in appropriate areas of the audit checklists.

The majority of information was assessed off-site (e.g. review of management plans). The site inspections concentrated on assessment of the effectiveness of environmental management and adequacy of performance. The extent of audit activities was limited to the time available for the audit site inspections and interviews over three days.

4.0 Technical Specialists Input

The Department requested the IEA team include technical specialists in the following fields:

- Groundwater and surface water management
- Biodiversity
- Geotechnical assessment of subsidence impacts.

The technical specialists provided technical advice to the IEA Lead Auditor during the audit site inspection and reporting periods. Specific findings from the technical specialists have been presented in Appendix D.

5.0 Environmental Management

A detailed implementation review was conducted against each management plan condition in PA 08_0101 and can be found in the Project Approval audit checklist in Appendix B. Table 9 summarises the approved strategies, plans or programs required under PA 08_0101 and provides a brief summary of the implementation review conducted against each plan. This section satisfies the IEA requirement to review the adequacy of any approved strategies, plans or programs required under PA 08_0101 required by Condition 12(d), Schedule 5 of PA 08_0101.

Table 10 Management Plan Adequacy Review

Document	Findings from Review
Noise Management Plan (NMP)	The Integra UG NMP (Document No. INTUG-263795162-21, version 3.1, dated 26 July 2019) was initially approved by the Department on 28 March 2017 prior to recommencement of mining by Glencore. Since this time the NMP has been updated and re-approved by the Department on three separate occasions, two of which fall within the audit period. These include: - The Department approved the NMP on 10 September 2018 following its review and update in response to the approval of Modification 8 of PA 08_0101. - The Department approved the NMP on 26 July 2019 following a review and updated of the plan to include attended noise monitoring for construction activities and cumulative noise management. Consultation with EPA While evidence of previous consultation requests being submitted to the EPA was provided to the auditors, no evidence of consultation with the EPA when the NMP was updated in 2019 was provided. This condition is therefore found to be not compliant. Plan Layout Table 1-1 of the NMP maps the project approval condition requirements with the relevant section of the NMP where this requirement is addressed. Inaccuracies were identified with regards to the sections referenced in Table 1-1 of the NMP. These are outlined further in the PA 08_0101 audit checklist. Noise Monitoring Summary Figure 2 of the NMP outlines the location of the following attended noise monitoring sites: - Noise assessment group (NAG) 3 - NAG 4 - NAG 5 - NAG 6 - NAG 8 - MAG 9 - NAG 10 The locations for NAG 1 and NAG 7 are not outlined on Figure 2 of the NMP, however these NAGs are monitored as part of the attended noise monitoring conducted by Umwelt during the audit period. Umwelt summarise the location of each attended noise monitoring location in the environmental noise monitoring reports.

Document	Findings from Review
	There is therefore a slight inconsistency between the monitoring locations specified in the NMP and those included in the attended noise monitoring. However, as there appear to be more monitoring locations than those outlined in the NMP, this does not constitute a non-compliance. Reporting Integra UG make available the environmental noise monitoring reports on the Integra UG public website. A summary of monitoring conducted during the year is reported in the Annual Reviews. The auditors reviewed the 2018 and 2019 Annual Reviews. It is noted that the noise monitoring summary provided in Section 6.3 of the Integra UG Annual Review does not clearly outline that monitoring is conducted at representative locations only or that this approach had been approved by the Department. Summary In general, the NMP was adequately addressing the requirements of Schedule 3, Condition 10.
Air Quality and Greenhouse Gas Management Plan (AQGGMP)	The Integra UG AQGGMP (Document No. INTUG-793190785-48, version 3.1, dated 26 July 2019) was initially approved by the Department on 28 March 2017 prior to recommencement of mining by Glencore. Since this time, the AQGGMP has been updated and re-approved by the Department on three separate occasions, two of which fall within the audit period. These include: • The Department approved the AQGGMP on 10 September 2018 following its review and update in response to the approval of Modification 8 of PA 08_0101. • The Department approved the AQGGMP on 26 July 2019 following its review and update to include a cumulative response protocol and update of location of TSP2. Summary Based on the evidence reviewed the AQGGMP was considered to adequately address the requirements of Schedule 3, Condition 15 with the exception of the following: • Collection of deposited dust samples not occurring in accordance with AS/NZS 3580.10.1:2016: This was in relation to Carbon Based failing to pick up the deposited dust samples in December within the required 30days +/- 2days. The AQGGMP requires sampling of Deposited Dust to be in accordance with AS/NZS 3580.10.1:2016 Methods for Sampling and Analysis of Ambient Air, Determination of Particulates—Deposited Matter—Gravimetric method. As monitoring of deposited dust was one day outside of the limits specified in AS/NZS 3580.10.1:2016 and this is the selected methodology specified in the AQGGMP this is found to be a non-compliance with regards to the implementation of the AQGGMP. No recommendation is required to be applied. • While evidence of previous consultation requests being submitted to the EPA was provided to the auditors no evidence of consultation occurring with the EPA when the AQGGMP was

Document	Findings from Review
	updated in 2019 was provided. As such this condition is found to be not compliant. Table 1-1 of the AQGGMP maps the project approval condition requirements with the relevant section of the AQGGMP where this requirement is addressed. Inaccuracies were identified with regards to the sections referenced in Table 1-1 of the AQGGMP. These are outlined further in the PA 08_0101 audit checklist.
Extraction Plan Longwalls 13-14 (EP LW13-14)	Integra UG LW13-14 EP (Document No. INTUG-793190785-151, version 3.0, dated 11 August 2017) was conditionally approved by the Department on 06 April 2017 prior to secondary extraction of Longwall 13 commencing on 23 May 2017. The Department formally approved the updated Integra UG LW13-14 Extraction Plan on 11 August 2017. A detailed review of the implementation of Integra UG's LW 13-14 EP is included in the findings provided by the Subsidence Specialist, refer to Appendix D. The Integra UG LW13-14 EP includes the following sub plans: - Coal Resource Recovery Plan - Subsidence Monitoring Program - Public Safety Management Plan - Land Management Plan - Built Features Management Plan, inclusive of: - Mount Owen Railway and Bettys Creek Bridges Asset Management Plan; - Eastern Rail Pit Asset Management Plan - Mount Owen TP2 Asset Management Plan - Bettys Creek Diversion Asset Management Plan Summary Based on the evidence reviewed the Integra UG LW13-14 EP was considered to adequately address the requirements of Schedule 3, Condition 20 with the exception of the following: - The names and location of Subsidence monitoring lines referenced in the plan is not consistent with those referenced in monitoring reports. This includes reference to the PH line and R line. Refer the findings in the Subsidence specialist report for further details. It is noted that the Integra UG LW13-14 EP document was last reviewed on 11 August 2017 and was due for review on 11 August 2020.
Extraction Plan Longwalls 15-16 (EP LW15-16)	Integra UG LW 15-16 EP (Document No. INTUG-793190785-2055, version 1.1, dated 08 August 2020) was formally approved by the Department on 16 August 2019 with secondary extraction of Longwall 15 commencing production on 19 September 2019. A detailed review of the implementation of Integra UG's LW15-16 EP is included in the findings provided by the Subsidence Specialist, refer to Appendix D.

Document	Findings from Review
	The Integra UG LW 15-16 EP includes the following sub plans: • Coal Resource Recovery Plan • Subsidence Monitoring Program • Public Safety Management Plan • Land Management Plan • Built Features Management Plan, inclusive of: ○ Mount Owen Railway and Bettys Creek Bridges Asset Management Plan ○ Mount Owen Mine Key Features - Asset Management Plan • Subsidence Management Protocol. Summary Based on the evidence reviewed the Integra UG LW15-16 EP was considered to adequately address the requirements of Schedule 3, Condition 20 with the exception of the following: • The names and location of Subsidence monitoring line MB15 is not referenced in the plan however is referenced in subsidence monitoring reports. • Predicted subsidence impacts are outlined in Table 4-1 of the IUG EP LW15-16 Subsidence Monitoring Program however this table does not refer to Longwall 16 as stated.
Water Management Plan (WMP)	The Integra UG site wide WMP (Document No. INTUG-793190785-68, version 5.1, dated 08 September 2019) was approved and implemented prior to the commencement of the audit period. A revised WMP was approved during the audit period, following approval of modification 8 of PA 08_0101 on 10 September 2018 and again on the 24 May 2019 following updates made to the water sharing arrangements between Integra UG and Rix's Creek North. A detailed review of the implementation of Integra UG's WMP is included in the findings provided by the surface water and groundwater specialists, refer to Appendix D. Summary Based on the evidence reviewed the Integra WMP was considered to adequately address the requirements of Schedule 3, Condition 31.
Biodiversity Management Plan (BMP)	Integra UG prepared the site-wide BMP (Version B, dated 30 June 2020) to comply with the requirements of Project Approval 08_0101 Schedule 3, Condition 32. The BMP was updated for MOD 8 and approved by the Department on 10 September 2018. A detailed review of the implementation of Integra UG's BMP is included in the findings provided by the biodiversity specialist, refer to Appendix D. Summary Based on the evidence reviewed the Integra BMP was considered to adequately address the requirements of Schedule 3, Condition 32.

Document	Findings from Review
Heritage Management Plan	The requirement for an HMP to be developed has been addressed in two management plans developed by Integra. This includes the Historic Heritage Management Plan (HHMP, Document No. INTUG-263795162-24, version 3.0, dated 10 September 2018) and the Aboriginal Heritage Management Plan (AHMP, Document No. INTUG-263795162-23, version 3.0, dated 10 September 2018). Both plans were initially approved by the Department on 06 April 2017 and were revised and resubmitted for approval by the Department following approval of Modification 8 of PA 08_0101. The Department approved the latest versions of the HHMP and AHMP on 10 September 2018. The auditors sighted evidence of consultation for both the AHMP and HHMP. Summary Based on the evidence reviewed the Integra HHMP and AHMP's were considered to adequately address the requirements of Schedule 3, Condition 33. Two OFIs to improve the AHMP were made relating to the wording of Section 4.2 and the status of archaeological sites which were destroyed in the 2017 audit period by the previous mine operator not being updated in the current version of the AHMP.
Rehabilitation Management Plan	The Mining Operations Plan (MOP) (Document No. INTUG-793190785-713, version 3.1, dated 08 September 2019) has been prepared to address the requirement for a Rehabilitation Management Plan. Following approval for recommencement of operations in 2017 Integra prepared and submitted to Resource Regulator (RR) a MOP which covered the period of 01 January 2017 to 31 December 2018. RR approved this MOP on 30 November 2016. A new MOP was prepared in 2018 which covered the period 01 November 2018 to 31 December 2023. The MOP was submitted to the RR in November 2018 following the approval of modification 8 to PA 08_0101 and approved on 19 November 2018. The 2018-2023 MOP was amended in 2018 and resubmitted to the RR for approval as MOP Amendment A (Version 1). The RR issued a 'Notice of Refusal' letter in relation to MOP Amendment A (Version 1) on 08 April 2019. The RR requested a number of changes and additional information be provided, as outlined in detail in Section 1.1.5 of the MOP. Integra resubmitted the MOP Amendment a (Version 2) to the RR which was subsequently approved by the RR on 31 May 2019. Administrative changes were made to the MOP in 2020 resulting in MOP Amendment B being issued to the RR for approval. The latest revision of the MOP, MOP Amendment B, was approved by RR on 30 June 2020. The auditors sighted evidence of consultation with the Department, OEH, DoI Water, Council and the CCC for the latest revision. Summary Based on the evidence reviewed the Integra MOP was considered to adequately address the requirements of Schedule 3, Condition 40.
Exploration Activities and Minor Surface Infrastructure	The Integra UG EAMSIMP (Document No. INTUG-793190785-49, version 3.0, dated 10 September 2018) was initially approved by the Department on 28 March 2017 prior to recommencement of mining by

Document	Findings from Review
Management Plan (EASIMP)	Glencore. The plan was revised in 2018 in response to the approval of Modification of the sites project approval 08_0101. The Department approved the revised EASIMP on 10 September 2018. Summary Based on the evidence reviewed the Integra EASIMP was considered to adequately address the requirements of Schedule 3, Condition 41. It is noted that Table 1-1- of the EASIMP outlines the project approval conditions and where they addressed in the plan. The table states that rehabilitation of disturbed areas is covered in section 4.3 of the EASIMP however this section related to the objectives and performance indicators for the plan. Instead rehabilitation management is outlined in Section 4.2 of the EASIMP.
Construction Traffic Management Plan (CTMP)	The Integra UG CTMP (Document No. INTUG-793190785-1294, version 1.0, dated 10 September 2018) was approved by the Department on 10 September 2018. Construction activities under Modification 8 commenced in 2019 after the approval of the CTMP. Summary Based on the evidence reviewed the Integra CTMP was considered to adequately address the requirements of Schedule 3, Condition 42.
Environmental Management Strategy (EMS)	The Integra UG EMS (Document No. INTUG-793190785-45, version 3.1, dated 26 July 2019) was initially approved by the Department on 19 December 2017. The EMS was subsequently reviewed and updated following approval of Modification 8 of PA 08_0101 and resubmitted for approval by the Department on 07 September 2018. The Department approved the revised EMS on 10 September 2018. Summary In general, the EMS was adequately addressing the requirements of Schedule 5, Condition 1.

6.0 Environmental Performance

This section assesses the requirement of the scope of works to “*assess the environmental performance of the development*”. The auditors based the assessment of the environmental performance of the site on the following:

- An assessment of the effectiveness and adequacy of the environmental management plans and programs required under the PA 08_0101. This is detailed in Section 5.0
- A review of the environmental aspects relevant to Integra UG and the performance of implemented measures. This is summarised in Section 6.1
- A review of compliance management practices in place at Integra UG (Section 6.1).
- A review of incidents reported during the audit period (Section 6.3).
- A review of complaints received during the audit period (Section 6.4).
- An assessment of compliance with the conditions of PA 08_0101, EPL 3390 and authorised leases. The findings of this assessment are provided in the compliance checklists presented in Appendix B with the identified non-compliances and associated recommendations summarised in Section 8.0.

6.1 Environmental Aspects Review

6.1.1 Noise

As an operational underground mine, noise emissions generated by Integra UG are generally limited to the following:

- Ventilation fans
- Compressor and gas flares
- Haulage of coal from the ROM coal stockpile to the project boundary
- Surface disturbance works, e.g. construction work, exploration activities, gas drainage work and remediation work.

Integra UG operates a comprehensive Noise Management System that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations. The Noise Management System, as well as all noise mitigation measures requiring implementation are outlined in the sites NMP, which is a requirement of Schedule 3 Condition 9 of PA 08_0101. A detailed review of the NMP against the requirements of this condition as well as the implementation status of the noise management controls outlined in the plan was conducted as part of this IEA. Detailed findings can be found in the Project Approval audit checklist in Appendix B. In summary, Integra UG utilise attended noise monitoring to assess compliance with noise criteria and unattended real time monitoring as an internal management tool. This is a widely accepted methodology for noise monitoring which is used throughout the mining industry. Furthermore, this approach is documented in the NMP, on which the EPA was consulted, and which was approved by the Department. Following interrogation of noise monitoring data collected during the audit period it is concluded that no exceedances of noise criteria were recorded during the audit period. In some instances, audible noise levels were identified; however, in all instances the results indicate that noise levels recorded were below the sites compliance criteria. The auditors conclude that Integra UG is operating a comprehensive noise management system in accordance with the approved NMP. While opportunities for improvement have been made (refer to Table 14), attended monitoring results indicate that Integra UG is complying with noise criteria specified in PA 08_0101 and the site's EPL.

6.1.2 Air Quality and Greenhouse Gas

Key risks to air quality caused by Integra UG's operations include odour and dust generation. Odour poses a low risk from an environmental point of view at Integra UG, with the main risk of odour occurring on site being from spontaneous combustion occurrences. The only risk of spontaneous

combustion for site operations is from the stockpile, which is located within Integra UG's consent boundary and is managed by Rix's Creek (Bloomfield). Dust generating activities at Integra UG include:

- Haulage of coal from the ROM coal stockpile to the project boundary
- Windblown dust from the pit top and ventilation infrastructure areas
- Construction activities
- Exploration activities
- Gas drainage works
- Ventilation works
- Subsidence remediation works.

Integra UG manages air quality in accordance with the site's AQGGMP. Air quality in the vicinity of Integra UG's operations is managed via a combination of:

- Ambient air quality monitoring
- Meteorological monitoring
- Site management measures.

Integra UG's air quality monitoring network includes:

- Three tapered element oscillating microbalances (TEOMs)
- Seven depositional dust gauges
- One high volume air sampler (HVAS).

A detailed review of the AQGGMP against the requirements outlined in PA 08_0101 as well as the implementation status of the air quality and greenhouse gas management controls outlined in the plan was conducted as part of this IEA. Detailed findings can be found in the Project Approval audit checklist in Appendix B.

A summary of monitoring conducted during the audit period is provided against Schedule 3 Condition 12. In summary, the following exceedances were identified:

- **PM₁₀ Annual:** Monitoring results recorded an annual average PM₁₀ below the annual average criterion of 30µg/m³ in 2017, 2018 and 2019. Results from 2020 indicate that all levels are below the annual average criterion of 30 µg/m³ as of 30 September 2020.
- **PM₁₀ 24hr:** Monitoring conducted during the audit period identified results which were above the PM₁₀ 24hr criterion (approx. 229 days where levels exceeded the 24-hour criterion). These results required investigations to be carried out in order to validate the cause of the exceedances. In all instances Integra UG summarised from investigations that the elevated results were not attributed to Integra UG operations. No evidence was obtained which invalidated the conclusions made by Integra, with regards to monitoring results recorded above the PM₁₀ 24hr criteria.
- **TSP:** Exceedances of the annual average TSP concentrations were recorded which required investigations to be carried out. Investigations concluded that Integra UG's operations did not contribute to these higher levels. Integra UG updated their monitoring network for HVAS TSP in 2019 which involved the removal of TSP1 as a monitoring point and a change in location for TSP2. The change allowed the TSP monitoring site to be located in an area that is more representative of site contribution.
- **Deposited Dust:** An exceedance of deposited dust above the annual average criteria of 4 g/m² /month during 2019 was recorded. Investigations conducted by Integra UG and external consultants Jacobs concluded that Integra UG's estimated contribution demonstrated compliance with the 'incremental impact' criterion of 2g/m²/month. It was also concluded that Integra UG was not the cause of exceedances of the total cumulative impact criteria.

Based on the evidence reviewed the management measures outlined in the AQGGMP were considered to have been adequately implemented at the time of the audit with the exception of the collection of deposited dust samples not occurring in accordance with AS/NZS 3580.10.1:2016, as stipulated in Table 4-1 of the AQGGMP. A number of opportunities for improvement have been made against conditions found to be compliant. These have been summarised in Table 14 and are noted against relevant conditions in the Project Approval Checklist provided in Appendix B.

6.1.3 Subsidence

The Department requested the IEA team include a technical specialist in the area of mine impact and subsidence. The technical specialist provided advice to the IEA Lead Auditor during the audit site inspection and reporting periods. Specific findings from the subsidence technical specialist has been presented in Appendix D.

6.1.4 Surface Water and Groundwater

The Department requested the IEA team include technical specialists in the area of surface and groundwater. The technical specialists provided advice to the IEA Lead Auditor during the audit site inspection and reporting periods. Specific findings from the surface and groundwater technical specialists have been presented in Appendix D.

6.1.5 Biodiversity

The Department requested the IEA team include a technical specialist in the area of Biodiversity. The technical specialist provided advice to the IEA Lead Auditor during the audit site inspection and reporting periods. Specific findings from the biodiversity technical specialist has been presented in Appendix D.

6.1.6 Heritage

Integra UG manage heritage items applicable to the mine in accordance with the HHMP and AHMP. A comprehensive review of the following evidence was conducted in relation to Integra UG's implementation of controls specific to heritage:

- Ground Disturbance Permits showing demarcation of disturbance footprints, identification of heritage items and heritage clearance requirements
- Clearance issued by external archaeologists
- Aboriginal due diligence archaeological assessments
- Aboriginal Cultural Heritage Working Group Meeting Minutes
- Aboriginal assessments prepared by external consultant OzArk prior to ground disturbance associated with MOD 8 construction occurring
- Complaints and incidents recorded during the audit period showing nil complaints or incidents received in relation to heritage
- Subsidence monitoring data indicating nil impacts to heritage items.

The auditors conclude that both the AHMP and HHMP were being adequately implemented during the audit period. It is noted that the majority of the controls outlined in the HHMP were not triggered during the audit period. Detailed findings from the heritage review can be found in the Project Approval audit checklist in Appendix B.

6.1.7 Visual

Visual amenity and lighting measures are reviewed annually as part of the Environment and Community (E&C) risk assessment process. No issues were identified in the annual E&C risk assessment process with regards to visual amenity and lighting on site. Integra UG mine's portal area is set below road level and therefore presents very minimal risk of direct and in direct offsite lighting from Integra UG's operations.

A lighting and visual amenity audit was conducted by Hansen Bailey in 2017. The audit report concluded that the operations at the mine were generally in accordance with PA 08_0101 Schedule 3, Condition 34. Visual amenity was reviewed as part of the audit site inspection conducted during daylight hours. No changes have been made to lighting on site which would affect visual and off-site

lighting impacts of the project during the audit period. A review of complaints and incidents recorded during the audit period showed that no complaints or incidents were recorded in relation to lighting or amenity during the audit period.

6.1.8 Waste

Integra UG have developed an internal Waste Management Plan to outline the requirements for management of waste produced across the site. The plan aims to ensure compliance with project approval conditions as well as Glencore's corporate Waste Management Protocol. Integra UG maintains a waste tracking spreadsheet as a corporate requirement which must be reported to Glencore Corporate on a monthly basis. The waste management plan identifies waste streams, waste monitoring and tracking procedures and details management measures to ensure the generation of waste is minimised and recycling of waste is maximised where practicable.

Evidence of waste segregation was observed during the audit site inspection. Separate bins for batteries, scrap metal, recycling, oil filters and cardboard recycling were observed. No evidence of waste being disposed of on site was identified by the auditors.

6.1.9 On-site Sewage Treatment

Integra UG has an on-site sewage treatment system (OSSM Approval Number 3969/2008), which includes a primary aeration tank with a secondary maturation pond and a package sewage treatment plant. Wastewater from the system is dispersed by irrigation sprays on dedicated irrigation areas. Monitoring is conducted on wastewater processed by the sewage treatment system for pH and faecal coliforms in accordance with Council Approval 3969/2008 and EPL 3390 Condition M2.2.

Quarterly maintenance of the on-site sewage treatment system is conducted by external contractor Garden Master Hunter Pty Limited. Quarterly maintenance reports provided by the service provider verified the system was operating within its capacity and in accordance with EPL discharge criteria during the audit period. Fencing and signage of the effluent discharge utilisation area were sighted during the audit site inspection.

6.1.10 Bushfire Management

Integra UG maintains a bushfire management plan which was developed in consultation with Eco Logical Australia who assisted with identification of asset protection zones, fuel loads and management measures.

Measures in place for bushfire management, as sighted by the auditor, include:

- An established first response team who assess all emergency incidents
- No smoking policy on site
- Maintenance of access tracks
- Fire extinguishers
- Water carts
- Maintained water fill points.

It was reported that there were no fires in the vicinity of the site during the audit period whereby Integra UG was required to assist the or and emergency services.

6.1.11 Rehabilitation and Mining Operations Plan

Rehabilitation management and mine closure criteria are outlined in the sites MOP which meets the requirements of Schedule 3, Condition 40 of PA 08_0101 and Condition 3a of the site's Mining Leases and Coal Lease. The auditors undertook a critical review of the MOP as part of the environmental performance review, and to address the requests made by the Resource Regulator during consultation.

Rehabilitation Strategy

The rehabilitation strategies outlined in the mine's environmental assessments and other documents referenced in Schedule 2, Conditions 2 and 3 and those listed in Table 11 of PA 08_0101 have been incorporated into the approved MOP for the project.

Integra UG have in place a Progressive Rehabilitation of Gas Wells and Surface Infrastructure Procedure which has been developed to track rehabilitation progress and to minimise the rehabilitation

required after closure of the mine. Integra UG review the gas wells each quarter to determine their operational need. When a gas well is deemed to be no longer required for future operations it is rehabilitated. Rehabilitation progress is monitored annually by external consultant's Umwelt and reported in an annual rehabilitation monitoring report. The 2018 and 2019 rehabilitation monitoring reports were reviewed by the auditors. In addition, a summary of the rehabilitation monitoring results is provided in the Annual Reviews.

Progressive rehabilitation was considered to have been adequate during the audit period and undertaken in accordance with the rehabilitation strategy outlined in the MOP.

Rehabilitation Objectives and Completion Criteria

The MOP includes the rehabilitation objectives outlined in Table 12 of PA 08_0101. A review against each objective outlined in Table 12 of PA 08_0101 was conducted and the results of the review are detailed against Schedule 3 Condition 38 in the PA 08_0101 checklist provided in Appendix B. In summary Integra UG was generally complying with the rehabilitation objectives listed in Table 12 of PA 08_0101.

Performance indicators and completion/relinquishment criteria are outlined in Section 6 of the MOP. Integra UG track annual performance against these indicators and criteria in the annual rehabilitation monitoring reports prepared by Umwelt during the audit period.

A detailed breakdown of rehabilitation progress against MOP predictions is provided against Schedule 3 Condition 40 in the PA 08_0101 checklist provided in Appendix B. This review included verification of disturbance area and rehabilitation area figures presented in the Annual Reviews against monitoring data provided by external rehabilitation consultants. It is noted that rehabilitation predictions for 2020 have not been made in the 2018-2023 MOP at the time of the audit. In addition, at the time of the audit period conclusion rehabilitation figures were not available. The auditors were provided with a GIS figure showing disturbed and rehabilitation land as of October 2020. The figure showed rehabilitation at Fan Site 3 and at various gas well sites across the site, as verified during the audit site inspection. Annual rehabilitation monitoring had not occurred for 2020 at the time of the audit inspection and should be reviewed in the next audit period.

Rehabilitation Monitoring and Reporting

Refer detailed findings against Schedule 3 Condition 40 in the PA 08_0101 checklist provided in Appendix B. In summary, Monitoring and reporting conducted with regards to rehabilitation was consistent with the requirements outlined in the sites MOP and Project Approval.

The audit findings conclude that Integra UG is effectively implementing the management measures outlined in the MOP. Detailed findings can be found in the Project Approval and Mining Lease audit checklists in Appendix B.

6.1.12 Traffic

Construction activities under Modification 8 had the potential to generate increased traffic impacts in the area. As a result a Construction Traffic Management Plan (CTMP) was required to be prepared which includes measures to minimise traffic impacts as well as a program to monitor and report on the effectiveness of these measures.

The auditors conducted a detailed review of the implementation of the CTMP, details of this review are provided against Schedule 3 Condition 42 of the PA08_0101 Audit Checklist (provided in Appendix B). It is noted that the CTMP includes reference and mitigation measures for construction of a new access road off Middle Fallbrook Road.

6.2 Compliance Management

6.2.1 Compliance Monitoring

Glencore Coal Assets Australia (GCAA) utilise CMO Compliance Management Software (CMO) as a management tool across all of its sites. The CMO Compliance Management database system is used to store and track compliance with development consents, leases, licences, and other approvals and their associated conditions. CMO is updated regularly as triggered by actions or the addition of new or

modified approvals. CMO is also utilised to assign and complete inspections and to track complaints, actions arising from internal or external consultation practices or actions following an audit.

During the audit site inspection, Integra UG demonstrated its use of CMO to the auditors. The CMO database included the requirements of the Project Approval, EPL, Mining Leases, Sewage Treatment Plant approvals and the key commitments / requirements for each management plan. The Integra UG E&C department used CMO to access evidence to demonstrate compliance with specific conditions of consent.

6.2.2 Internal Assurance

GCAA implements an internal audit program which is conducted in accordance with the Glencore corporate procedure for internal and external auditing. The audit program involves internal compliance audits conducted every three years prior to an IEA. The internal compliance audit assesses compliance against the site's Project Approval conditions and associated approval conditions which have been entered into CMO. Integra UG is required to enter evidence into CMO against each relevant condition to assist with the compliance review process.

6.2.3 Monthly Inspections

The Integra UG E&C department conducts monthly environmental inspections of the site. The monthly inspections are conducted to:

- Identify any potential non-conformances or environmental incidents that have not been previously identified/reported
- Maintain a visual presence around the site to promote environmental awareness to mine personnel and contractors
- Maintain site familiarity by ensuring E&C personnel are aware of any physical changes to operations or processes at the site.

The monthly environmental inspections include a description of general environmental conditions as well as checks of specific areas. The inspections include identified actions, an action category, due date and status and include photos and attachments where relevant. Depending on the category of the action, it may be entered into CMO and tracked.

The auditors sighted examples of completed inspections conducted by the Integra UG E&C department. Inspections were observed to be undertaken monthly. The reports were considered to be sufficiently detailed and well completed with appropriate actions identified for issues raised.

In addition to the monthly environmental inspections, the auditors sighted evidence that Integra UG was undertaking weekly subsidence inspections and pre and post rainfall inspections.

6.2.4 Ground Disturbance Permit (GDP) Process

Integra UG implements a work permit system in accordance with the GCAA Work Authorisation and Permit Management procedure. In the event that ground disturbance is identified during the Work Authorisation process a Ground Disturbance Permit (GDP) is required to be completed. The GDP is a risk management tool designed to ensure the proposed works have the required environmental approval and that the person undertaking the works has appropriately managed risks to minimise impacts on the environment and community. The GDP provides a checklist of environmental aspects that must be completed by the employee / contractor initiating the work and internally approved by the Integra UG E&C department prior to the commencement of any work.

The auditors sighted examples of completed GDP forms for construction activities conducted in relation to modification 8 as well as rehabilitation works conducted during the audit period.

Part 1 of the GDP form requires the person requesting the permit to include task details. It includes checks of whether the task area is within approval boundaries and how the boundaries have been identified. It also requests details of topsoil and/or vegetation removal and whether erosion and sediment control is required (amongst other details). Part 2 of the form requires the E&C representative to visit the work area. Part 3 discusses erosion and sediment control including sediment dam calculations. Parts 4, 5 and 6 are completed by the E&C representative and assess community interaction, cultural heritage and ecology. Part 7 assesses clearing and stockpiles including topsoil

management and vegetation management. Part 8 enables the permit issuer to include specific permit conditions. Part 9 is the authority to proceed and includes sign off by the E&C representative, Permit Holder and Permit Issuer. Part 10 includes a boundary check and erosion control sign off. The Permit also includes a list of attachments (e.g. risk assessment, erosion and sediment control plan, pre-clearance survey etc.), a record of planned and unplanned task monitoring and inspections, a section for worker sign on review and re-sign (Part 14), a post-disturbance assessment (completed by the E&C representative on permit completion / cancellation) and a sign off upon permit completion / cancellation.

A finding was made in relation to a number of internal incidents recorded in relation to non-compliances with environmental management controls identified in relevant GDPs. The auditors noted that the internal incidents resulted in vegetation clearing in excess of that approved under the authorised GDPs. A primary control to ensure compliance with the EAMSIMP is the implementation of Integra UG's GDP process. While these incidents are not deemed to be reportable incidents under the definition of an incident in the PA 08_0101, they show a minor lack of implementation of controls outlined in the site environmental management plans.

6.3 Incidents

Environmental incidents are recorded in CMO, the compliance management tool used by GCAA (discussed further in Section 6.2.1), and determines the appropriate corrective or preventative action using the Incident Cause Analysis Method (ICAM) where required.

An incident is defined by the project approval 08_0101 as a set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval.

The auditors reviewed the site's incident database, external consultant's investigation reports as well as results presented in the Annual Reviews during the audit period. No reportable incidents occurred during the audit period which required reporting under Schedule 5, Condition 9 of PA 08_0101.

It is noted that Integra UG did report one incident internally in relation to deposited dust samples being not collected within the required timeframe. This incident was not reported to the Department as it did not constitute an incident as defined by the project approval 08_0101.

Four internal incidents were recorded which related to non-compliances with environmental management controls identified in relevant GDPs. It is noted that in all instances the disturbance occurred within the disturbance footprint of Integra UG but were outside the GDP boundary areas authorised by Integra UG's E&C department.

Three internal incidents were recorded which related to air quality data. These included the incident outlined above in relation to collection of deposited dust samples as well as air quality annual averages recorded above criteria limits.

The air quality annual averages incident was reported to the Department and was investigated by external consultant Jacobs who concluded that the data did not indicate that Integra UG was the cause of exceedances of the total cumulative impact criteria. The results of the investigation were reported in the 2019 Annual Review as agreed with the Department.

6.4 Complaints

Integra UG has established a Community Complaint Grievance and Enquiry Management Procedure which aligns with the GCAA complaint response protocol, to respond to community complaints. Integra UG operates a free Community Complaints and Enquiry Hotline which operates 24 hours per day, 7 days per week. The number is **1300 573 352**.

No environmental-related complaints were received during the audit period. One complaint was recorded during the audit period. The complaint was in relation to a vehicle impacting a landowner's fence. It was not known if the vehicle was being driven by an Integra UG employee or contractor however, in good faith, Integra UG paid for repair of the landowner's fence.

6.5 Community Consultative Committee

Integra UG has a range of communication methods in place which enables it to share information with the local community. These methods include:

- The Community Consultative Committee (CCC)
- Aboriginal Heritage Meetings
- Community engagement events
- The Integra UG Public Website <https://www.glencore.com.au/operations-and-projects/coal/current-operations/integra-underground>
- Community Newsletters.

Integra UG utilise the established MOC Community Consultative Committee (CCC) which meets twice a year to satisfy the requirements of Schedule 5, Condition 8 of PA 08_0101.

No issues were identified as a result of communication with the Chair of the CCC (refer Appendix C) as part of the consultation process for the IEA.

7.0 Status of 2017 IEA Recommendations

The IEA conducted a reviewed against the recommendations made in the 2017 IEA conducted by WSP. The findings from this review have been provided in Appendix F.

8.0 Audit Findings

The findings of the IEA compliance assessment are presented in this section.

Table 11 below provides a summary of compliance against the sites Project Approval, EPL and Mining Leases. The non-compliances and corresponding recommendations are summarised in 0 and detailed in Appendix B. It is noted that the categories of 'Not verified' and 'Observation' were not assigned to any audit criteria.

Table 11 Summary of Audit Findings

Approval	Total No. of Conditions	Compliant	Non Compliant	Admin Non Compliance	Not Triggered	Noted
PA 08_0101	238	163	5 – Low Risk	2	64	3
EPL 3390	78	48	0	2	16	12
ML1525	39	23	0	0	14	1
ML1551						
ML1676						
ML1437						
ML1518						
ML1786						
ML1742						
ML1740						
CL382						

8.1 Identified Non-Compliances and Recommendations

8.1.1 Project Approval PA 08_0101

Non-Compliances identified against PA 08_0101 have been summarised in Table 12 below. Further audit commentary and evidence is provided against each condition in the PA 08_0101 Audit Checklist provided in Appendix B.

Table 12 Non Compliances against PA 08_0101

Ref No.	Condition Ref	Requirement	Independent Audit Finding	Recommendation
003	SCH 3, C3	TERMS OF APPROVAL The Proponent must comply with the: (a) Statement of Commitments; and (b) conditions of this approval. <i>Notes to condition 2 and 3:</i> • <i>Previous EAs for the project are listed in Appendix 2;</i> • <i>The project layout plans are shown in Appendix 3;</i> • <i>The Statement of Commitments is reproduced in Appendix 7; and</i> • <i>This project approval is intended to regulate all existing and approved development on site.</i>	Non-Compliance Risk Level - Low A detailed review of compliance was conducted against Integra UG's Project Approval (PA) 08_0101 and included Statement of Commitments. The results from that review are included in this checklist. Based on the results of the review the auditors concluded the following: • 7 non-compliances were identified against conditions of PA 08_0101. These were in relation to the following: ○ Consultation with Subsidence Advisory New South Wales (SANSW) before constructing a new building on site ○ Consultation with required agencies with regards to updates to management plans ○ Collection of depositional dust samples in accordance with monitoring methods specified in relevant Australian Standards ○ Evidence not provided to validate that ecological survey reports were provided to the Department within the required timeframes ○ Implementation of controls stipulated in Ground Disturbance Permits (GDPs). • No non-compliances were identified against the Statement of Commitments outlined in PA 08_0101.	Recommendation not required, refer to individual non-compliances in this checklist

Ref No.	Condition Ref	Requirement	Independent Audit Finding	Recommendation
			While minimal non-compliances were noted during the 2020 IEA audit period, compliance with Schedule 2, Condition 3 cannot be stated as being compliant as non-compliances against the conditions of PA 08_0101 were identified. Therefore, this condition must be found not compliant.	
011	SCH2 C11	The Proponent must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA and SANSW. <i>Notes:</i> • <i>Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works;</i> • <i>Part 8 of the EP&A Regulation sets out the requirements for the certification of the project; and</i> • <i>The project is located in the Patrick Plains Mine Subsidence District. Under Section 15 of the Mine Subsidence Compensation Act 1961, the Proponent is required to obtain the SANSW's approval before constructing or relocating any improvements on site.</i>	Non-Compliance Risk Level – Administrative non-compliance During the audit period (29 November 2017 to 03 December 2020) one new building was constructed. The building is a transportable structure utilised in the administrative/office section of the mine. <u>Compliance with SANSW</u> The auditors sighted a letter from SANSW, dated 30 October 2020, advising that Integra UG's construction of the additional building was exempt from requiring approval from SANSW under Sections 21, 22 and 23 of Part 3 of the <i>Mine Subsidence Compensation Act 1961</i>. Integra UG commenced consultation with SANSW after construction of the new building was completed. Notes provided under Schedule 2, Condition 11 of PA 08_0101 requires that SANSW's approval be obtained before constructing or relocating any improvements on site. As exemption from the SANSW was received in 2020, post construction, this condition is not compliant.	Recommendation not required as the construction conducted was exempt from requiring approval from SANSW under Sections 21, 22 and 23 of Part 3 of the <i>Mine Subsidence Compensation Act 1961</i>. Integra UG track compliance requirements in the online compliance database CMO which includes this requirement, so as to prevent a reoccurrence of this in future.
031	SCH3 C9a	Noise Management Plan This plan must: (a) be prepared in consultation with the EPA, and then submitted to the Secretary for approval;	Non-Compliance Risk Level – Low While evidence of previous consultation requests being submitted to the EPA was provided to the auditors, no evidence of consultation with the EPA when the NMP was	IEA REC 01 – It is recommended that Integra UG confirm that a request for consultation was sent to the EPA with regards to the latest update of the NMP. Evidence

Ref No.	Condition Ref	Requirement	Independent Audit Finding	Recommendation
			updated in 2019 was provided. This condition is therefore found to be not compliant.	of consultation should be provided in the NMP, as has been Integra UG's practice in the past.
047	SCH3 C15	Air Quality & Greenhouse Gas Management Plan The Proponent must prepare an Air Quality & Greenhouse Gas Management Plan for the project to the satisfaction of the Secretary. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	Non-Compliance Risk Level – Low Based on the evidence reviewed the AQGGMP was considered to have been adequately implemented at the time of the audit with the exception of collection of deposited dust samples not occurring in accordance with AS/NZS 3580.10.1:2016, as stipulated in Table 4-1 of the AQGGMP. Details of the incident are outlined below: CMO Incident Ref 2020011614.1, dated 16 January 2020: This incident was in relation to Carbon Based failing to pick up the deposited dust samples in December within the required 30days +/- 2days. The AQGGMP requires sampling of Deposited Dust to be in accordance with AS/NZS 3580.10.1:2016 Methods for Sampling and Analysis of Ambient Air, Determination of Particulates—Deposited Matter—Gravimetric method. As monitoring of deposited dust was one day outside of the limits specified in AS/NZS 3580.10.1:2016 and this is the selected methodology specified in the AQGGMP this is found to be a non-compliance with regards to the implementation of the AQGGMP.	Recommendation not required as Integra UG have consulted with Carbon Based to prevent a reoccurrence of this non-compliance in future.
048	SCH3 C15a	Air Quality Greenhouse Gas Management Plan (a) be prepared in consultation with EPA, and then submitted to the Secretary for approval;	Non-Compliance Risk Level – Low While evidence of previous consultation requests being submitted to the EPA was provided to the auditors no evidence of consultation occurring with the EPA when the AQGGMP was updated in 2019 was provided. As such this condition is found to be not compliant. Evidence of submission to the Secretary is detailed against schedule 3, condition C9.	IEA REC 02 – It is recommended that Integra UG confirm that a request for consultation was sent to the EPA with regards to the latest update of the AQGGMP. Evidence of consultation should be provided in the AQGGMP, as has been

Ref No.	Condition Ref	Requirement	Independent Audit Finding	Recommendation
				Integra UG's practice in the past.
078	SCH3 C29	Mount Owen Bettys Creek Diversion The Proponent must: (a) commission a suitably qualified and independent expert, whose appointment has been approved by the Secretary, to carry out a detailed survey of geotechnical, geomorphic and ecological baseline condition of the Mount Owen Bettys Creek Diversions: • prior to carrying out any second workings under the creek diversions; and • within 6 months of completing the second workings under these creek diversions; and (b) provide a copy of these surveys to the Department within a month of the completion of each survey.	Non-Compliance Risk Level – Administrative non-compliance Requirements for this condition include the following: • Survey to be conducted within 6 months of completing LW13 (by 10 February 2019). Survey was conducted in October 2018, however evidence of this being submitted to the Department within the required timeframe was not provided. • Survey to be completed prior to commencing LW14 on 07 September 2018. Survey completed prior to commencing LW14 on 07 September 2018. Survey was conducted in May 2018, however evidence of this survey being submitted to the Department within the required timeframe was not provided. • Survey conducted within 6 months of completing LW14 (by 17 February 2020); Survey conducted in June 2020. This survey was provided to the Department on 03 July 2020. On 01 May 2020 Integra UG sought endorsement for SLR to be appointed as experts to conduct the required stream surveys. The Department responded on 20 May 2020 and approved the appointment of the experts. On the basis that the evidence provided did not validate compliance with Schedule 3, Condition 29 this condition is found to be not compliant.	IEA REC 03: Integra UG to ensure that survey reports are provided to the Department in accordance with Schedule 3, Condition 29.
128	SCH3 C41	Exploration Activities and Minor Surface Infrastructure Management Plan The Proponent must prepare an Exploration Activities and Minor Surface Infrastructure Management Plan for the	Non-Compliance Risk Level – Low A review of incidents recorded in Integra UG's internal database CMO during the audit period was conducted by the auditors. Four internal incidents were recorded which related to non-compliances with environmental management controls identified in relevant GDPs. It is noted that in all instances the	Recommendation not required as, based on evidence reviewed, Integra UG's actions at the time of the audit are adequate to address the cause

Ref No.	Condition Ref	Requirement	Independent Audit Finding	Recommendation
		project to the satisfaction of the Secretary. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	disturbance occurred within the disturbance footprint of Integra UG but were outside the GDP boundary areas authorised by Integra UG's E&C department. It is also noted that a total number of 72 GDPs were processed during the audit period. While it has been found that the internal incidents resulted in vegetation clearing in excess of that approved under the authorised GDPs, the auditors note that Integra UG's GDP process is a well-established management measure which allows identification of risks to the environment and ensures impacts to areas outside the mine disturbance footprint are avoided. In assessing compliance with the implementation of the EAMSIMP the auditors must review the management measures outlined in the plan and validate if they are being effectively implemented during the audit period. A primary control to ensure compliance with the objectives of the plan is the implementation of Integra UG's GDP process. While these incidents are not deemed to be reportable incidents under the definition of an incident in the PA 08_0101, they show a minor lack of implementation of controls outlined in the EAMSIMP. Therefore, a non-compliance has been identified. The auditors note that following each incident actions were made to address the root cause of each incident. This included improving communication with contractors regarding the GDP process. It is noted that reporting of internal non-conformances is an essential method of ensuring continual improvement. Therefore, while these incidents should be avoided, it is important that non-conformances of this nature continue to be reported in Integra UG's internal incident management system. While a non-compliance has been identified the auditors believe, based on evidence reviewed, that Integra UGs actions are adequate at addressing the cause and preventing reoccurrences of this nature. Therefore, no recommendation has been applied for this non-compliance.	and prevent reoccurrences of this nature.

8.1.2 Environmental Protection Licence 3390

Non-Compliances identified against EPL 3390 have been summarised in Table 12 below. Further audit commentary and evidence is provided against each condition in the EPL 3390 audit checklist provided in Appendix B.

Table 13 Non Compliances against EPL 3390

Ref No.	Condition Ref	Requirement	Independent Audit Finding	Recommendation
EPL-25	O2.4	The licensee must prepare a sewage treatment system maintenance program. The program must include: a) Certification from the system provider that the sewage treatment system is operating within its capacity; b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and c) Provide written records of each quarterly inspection.	Non-Compliance Risk Level – Administrative non-compliance Integra UG submit the sewage treatment quarterly maintenance reports along with the Annual Returns to the EPA each year. The maintenance reports do not record the time that maintenance procedures were carried out. From November 2019 onwards, the time has been written onto the maintenance reports, however prior to this the date time was not recorded. This finding has triggered a non-compliance of Condition O2.4 of EPL 3390 however as Integra UG were capturing the time on the maintenance records since November 2019 no recommendation is required.	Recommendation not required as Integra UG updated the maintenance report forms in November 2019. Maintenance forms as of November 2019 capture the time that maintenance procedures are carried out.
EPL-37	M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Non-Compliance Risk Level – Administrative non-compliance Noise monitoring reports provided by Umwelt provide the following information: - Time in which monitoring occurred - Date in which monitoring occurred - Location in which monitoring occurred The name of the person who collected the sample is not referenced in the monitoring report.	IEA REC 04: Integra UG to ensure that the name of the person who undertook noise monitoring in accordance with the EPL is recorded and can be produced to validate compliance with Condition M1.3 of EPL 3390.

8.1.3 Mining Leases

There were no Non-Compliances identified against Integra UG's mining leases.

8.2 Summary of Opportunities for Improvement

The table below outlines the opportunities for improvement (OFI) identified during the audit. The OFIs detailed below are based around continuous improvement opportunities identified during the audit and do not represent immediate non-compliance issues.

Table 14 Summary of Opportunities for Improvement

Condition Ref	OFI Ref	Context	OFI
PA 08_0101 SCH3 C9	IEA OFI 01	Section 3.2.1 of the NMP indicates that sound power testing will be conducted on all plant and equipment.	It is suggested that Section 3.2.1 of the NMP be amended so that the commitment for sound power testing is applicable to surface equipment and infrastructure only
	IEA OFI 02	The locations for NAG 1 and NAG 7 are not outlined on Figure 2 of the NMP, however these NAGs are monitored as part of the attended noise monitoring conducted by Umwelt during the audit period. Umwelt summarise the location of each attended noise monitoring location in the environmental noise monitoring reports. There is therefore a slight inconsistency between the monitoring locations specified in the NMP and those included in the attended noise monitoring. However, as there appear to be more monitoring locations than those outlined in the NMP, this does not constitute a non-compliance.	Ensure the attended noise monitoring locations outlined in the NMP are reflective of the locations being monitored and reported in the quarterly environmental noise monitoring reports. Appendix A, Figure 2.1 of the environmental noise monitoring reports should be consistent with Figure 2 of the NMP.
	IEA OFI 03	The noise monitoring summary provided in Section 6.3 of the Integra UG Annual Review does not clearly outline that monitoring is conducted at representative locations only or that this approach had been approved by the Department.	It is suggested the annual review outline that the Department has approved Integra UG conduct attended monitoring at representative
PA 08_0101 SCH3 C9c-d	IEA OFI 04	Table 1-1 of the NMP maps the project approval condition requirements with the relevant section of the NMP where this requirement is addressed. Some inconsistencies with the references made in the table and the information provided in the sections referenced was identified.	It is suggested that Table 1-1 of the NMP be updated to better reflect where the project approval requirements of the NMP are outlined in the plan.
PA 08_0101 SCH3 C11	IEA OFI 05	The auditors identified that Table 38 of the Annual Review presented much higher emissions figures being vented compared to those being flared. Table 38 also shows significant amounts being sent to	It is recommended Integra UG review the greenhouse gas data presented in the Annual Reviews to ensure

Condition Ref	OFI Ref	Context	OFI
		a third party (power station). For example, in 2019 the Annual Review states that 485,972 t CO ₂ -e of vented emissions and only 79,739 t CO ₂ -e of flared emissions were recorded. The 2019 Annual Review also shows 426,643 t CO ₂ -e being sent to a third party. Integra UG commented that there may be errors reported in the 2017, 2018 and 2019 Annual Reviews and that this will be reviewed and rectified in the 2020 Annual Review.	accurate quantities of flared and vented emissions are reported.
PA 08_0101 SCH3 C12	IEA OFI 06	The data collected during days classified as extraordinary events was removed from Integra's annual data set resulting in the rolling annual averages being below the criteria specified in Table 9 of PA 08_0101. As a result, the rolling annual average total suspended particulates (TSP) reported in the in the air quality monitoring reports was higher than the rolling annual average for TSP reported in the 2019 Annual Review.	It is recommended that the Annual Reviews more clearly outline where data has been removed from the rolling annual averages presented in the Annual Reviews. This ensures a clear link between the air quality monitoring data and the summaries provided in the Annual Review.
PA 08_0101 SCH3 C14a	IEA OFI 07	Management and contingency measures are triggered by visual monitoring and alerts from the real time operational monitoring and forecast systems as outlined in the Dust Management TARP. The AQGGMP does not make reference to the dust TARP.	It is suggested that the AQGGMP makes reference to the internal dust TARP.
PA 08_0101 SCH3 C15d-e	IEA OFI 08	Table 1-1 of the AQGGMP maps the project approval condition requirements with the relevant section of the AQGGMP where this requirement is addressed. Some inconsistencies with the references made in the table and the information provided in the sections referenced was identified.	It is suggested that Table 1-1 of the AQGGMP be updated to better reflect where the project approval requirements of the AQGGMP are outlined in the plan.
PA 08_0101 SCH3 C30	IEA OFI 09	The workshop area contained an outside storage area for hydrocarbons including oils and greases. The bund was uncovered and had a considerable amount of sludge built up on the floor of the bund. The condition sighted at the time of the audit may impact the storage capacity of the bund.	Review the operation and capacity of the oil water separator at the workshop to manage rainfall and spill events in accordance with relevant EPA guidelines and standards. Implement any identified actions or controls accordingly.
PA 08_0101 SCH3 C	IEA OFI 10	Outside the concrete kerb / bund containing spills and runoff to the sump is situated another grated inlet pit. Hydrocarbon staining was observed both outside the concrete bund and around the surface of the oil water separator. In close proximity to this system is a well	Update the WMP to specifically describe the operation, inspection and management regime of stormwater, chemical containment and oily water separators.

Condition Ref	OFI Ref	Context	OFI
		vegetated and stable clean water channel, separated by a ~400mm high earth bund. Visually, no hydrocarbon staining or other evidence of spills / discharge to the clean water drain was evident.	
PA 08_0101 SCH3 C	IEA OFI 11	Annual Reviews in 2018 and 2019 note poor condition of Mount Owen's Middle Bettys Creek diversion, including rill erosion and nearby cracking. Whilst the cracking and erosion issues noted have not been attributable to Integra UG operations, there is opportunity to update the WMP to remove ambiguity in how channel stability and erosion is identified in the WMP.	Update the WMP to remove ambiguity in how channel stability and erosion is identified in the WMP (for example, how is rill erosion or channel stability attributed to LW operations or otherwise). It is recommended the WMP include quantifiable triggers (i.e., define 'significant'), and details how actions are then communicated and jointly managed between Mount Owen and Integra UG.
PA 08_0101 SCH3 C31	IEA OFI 12	The Pollution Incident Response Management Plan does not clearly outline the handling, storage and incident response for storage of chemicals at Ventilation Shaft 3	Update Pollution Incident Response Management Plan to document the handling, storage and incident response for storage of chemicals at Ventilation Shaft 3 (i.e. Solcenic Emulsion).
PA 08_0101 SCH3 C32B	IEA OFI 13	A summary of rehabilitation status for gas well rehabilitation sites is provided in the Annual Review, however the Annual Review does not include a summary of the status of rehabilitation in the woodland rehabilitation areas or the creek crossings which relate specifically to the construction conducted as part of modification 7.	It is suggested that the Annual Review report on the status of all rehabilitation conducted across Integra UG in particular rehabilitation of woodland rehabilitation areas and creek crossing rehabilitation.
PA 08_0101 SCH3 C33	IEA OFI 14	Section 4.2 of the AHMP indicates that the management of fencing and signage in the Bettys Creek habitat Management Area may fall to Integra UG when in fact this is the responsibility of Mount Owen.	It is suggested that during the plans next revision the wording in paragraph 1 of Section 4.2 of the Aboriginal Heritage Management Plan be updated to reflect that management of fencing and signage in the Bettys Creek Habitat Management Area is the responsibility of Mount Owen.
PA 08_0101 SCH3 C33	IEA OFI 15	The status of archaeological sites which were destroyed in the 2017 audit period by the previous mine operator has not been updated in the AHMP	It is suggested that: a) AHIMS is reviewed to confirm the status of these sites has been updated; and,

Condition Ref	OFI Ref	Context	OFI
			b) The status of the archaeological sites which were destroyed by the previous operator be updated in the AHMP
PA 08_0101 SCH3 C34	IEA OFI 16	Evidence was not provided to verify if visual amenity and lighting on site was to the satisfaction of the Secretary, as required by Schedule 3, Condition 34.	It is recommended a summary of lighting and visual impacts is made in the annual review each year. To ensure visual amenity and lighting on site at Integra UG is to the satisfaction of the Department
PA 08_0101 SCH3 C40	IEA OFI 17	A summary of rehabilitation monitoring and reporting is provided in the Annual Reviews. The auditors reviewed the data presented in the 2017, 2018 and 2019 Annual Reviews and notes the following: - In 2017 Table 36 of the Annual Review stated the total disturbance area as 3.2 (ha) indicating that this was the total disturbance area for the year and not the cumulative disturbance area of the site (which was reported in Table 35). - In 2018 and 2019 the same table (now Table 38 of the Annual Review) reported the total disturbance area to be 95.66 ha and 109.1 ha respectively. Discussion with Integra UG indicated that these figures were reporting the cumulative disturbance area opposed to the disturbance area for the year. The 2018 and 2019 Annual Reviews do not specify the annual disturbance area. It is noted that the cumulative disturbance area is already being reporting in Table 46 of the Annual Reviews and the current presentation of data makes it difficult to compare annual disturbance predictions made in the MOP (which are provided in Table 47) to actual annual figures.	It is recommended the Annual Review clearly outlines the total land disturbed each year. Alternatively, Table 38 of the Annual Reviews should clearly outline that the Total Disturbance Area is a cumulative figure.
PA 08_0101 SCH3 C41d	IEA OFI 18	Table 1-1- of the EAMSIMP outlines the project approval conditions and where they addressed in the plan. The table states that rehabilitation of disturbed areas is covered in section 4.3 of the EAMSIMP however this section related to the objectives and performance indicators for the plan. Instead rehabilitation management is outlined in Section 4.2 of the EAMSIMP.	It is suggested that Table 1-1 be updated in the next revision of the plan to accurately reflect where rehabilitation management is covered in the plan.

Condition Ref	OFI Ref	Context	OFI
PA 08_0101 SOC 209	IEA OFI 19	The Surface Water Impact Assessment for Integra UG Mine Longwall Extension Modification (Modification 8) identified that Subsidence may lead to indirect impacts on Bettys Creek channel and floodplain. It is noted that the rainfall inspection form prompts monitoring of any notable changes to Glennies Creek Flood Plain and Channel and to Mains Creek Flood Plain and Channel. The form does not include prompts to monitor changes to Bettys Creek Flood Plain and Channel.	It is recommended that the rainfall inspection form be updated to prompt monitoring of any notable changes to Bettys Creek Flood Plain and Channel
EPL M2.2	IEA OFI 20	The requirement for Ambient water quality monitoring was added to EPL 3390 in May 2020 following a licence variation issued by the EPA on 26 May 2020. Quarterly monitoring records show monitoring of pollutants is conducted in accordance with Condition M2.2. The sampling method is not outlined on the water quality monitoring results summary.	It is recommended the sampling method is documented on the effluent and water monitoring results summary
	IEA OFI 21	It is noted that water quality results are summarised in the Integra UG Quarterly Environmental Monitoring Reports. Ambient water quality monitoring results at all required EPL points is not summarised in these reports. Reference is made to Monitoring Points 8, 9 and 10 only (GC1, GC2 and GC3 respectively) despite all EPL monitoring points being referenced in the WMP. Discussion with Integra UG E&C Manager outlined that the monitoring points not outlined in the Integra UG quarterly environmental monitoring reports were excluded as these monitoring point locations were dry or too low to allow samples to be taken. Integra UG noted that the environmental monitoring reports could be updated to reflect sampling points where samples could not be taken.	It is recommended that the Integra UG Quarterly Environmental Monitoring Reports include a summary of all EPL monitoring points. Where samples cannot be taken due to low water levels this should be outlined in the reports.
Extraction Plan LW 13-14	IEA OFI 22	The names and location of Subsidence monitoring lines referenced in the plan is not consistent with those referenced in monitoring reports. This includes reference to the PH line and R line.	It is suggested that the survey lines referenced in the Integra UG EP LW13-14 Subsidence Monitoring Program be consistent with those being monitored.

Condition Ref	OFI Ref	Context	OFI
			Reference should be made to the R Line and PH Line in the Subsidence Monitoring Program.
	IEA OFI 23	The Integra UG LW13-14 EP document was last reviewed on 11 August 2017 and was due for review on 11 August 2020.	Ensure the Integra UG LW13-14 EP is reviewed in accordance with the specified review date on the plan.
Extraction Plan LWs 15-16	IEA OFI 24	The names and location of Subsidence monitoring line MB15 and R Line are not referenced in the plan however they are referenced in subsidence monitoring reports.	It is suggested that the survey lines referenced in the IUG EP LW15-16 Subsidence Monitoring Program be consistent with those being monitored. Reference should be made to the R Line in the Subsidence Monitoring Program.
Groundwater specialist	IEA OFI 25	The auditor notes that Section 8.1.1 of the WMP states that an investigation into the high salinity observed in the alluvial aquifers (particularly Bettys Creek) will be undertaken in 2017. The WMP should be updated to reflect the results from this assessment, namely the identification of any impacts on surrounding groundwater dependant ecosystems, private groundwater extractors and the salinity values of the Hunter salinity trading scheme.	The WMP should be updated to reflect the results from the investigation into the high salinity observed in the alluvial aquifers conducted in 2017.
Biodiversity Specialist	IEA OFI 26	It is noted that the BMP does not specify the monitoring sites (including reference sites) which are referenced in the monitoring reports.	It is recommended the BMP makes specific reference to the monitoring sites including reference sites. Locations of sites should be outlined including the monitoring site which was added in 209 (SG03) and monitoring sites which were relocated (SB01).
Biodiversity Specialist	IEA OFI 27	Integra UG engaged Enright Land Management to conduct weed and pest management services during the audit period. An annual completed weed works report is prepared by Enright which summarises the weed and pest work conducted as part of the ongoing weed control program. While the annual completed weed works reports are considered adequate at detailing the progress of weed management, a number of improvements could be made to the reporting.	While the annual completed weed works reports are considered adequate at detailing the progress of weed management, the following improvements could be made to the reporting: - The location of weed control activities could be better noted within Table 1 for each weed - The months in which weeds were treated should be noted to allow consideration of the effectiveness of weed control effort

Condition Ref	OFI Ref	Context	OFI
			- For each weed, the report should if the same location(s) have been treated for the same weed species within the past five years. This will allow the effectiveness of control methods to be evaluated and for future control strategies to be better targeted - The success of weed control works for each species, both within the current year and previous years, could be outlined in Table 1 - Mapping: some colours shown on maps are not included in legends, or are difficult to discern. Indication of the month of treatment in the legend would be helpful. - Mapping: A separate map indicating weed treatment priority areas in the coming year would allow better tracking of progress. This should also outline and discuss any areas of new infestations recorded, and their reasons e.g. disturbance due to specific construction.
Subsidence Specialist	IEA OFI 28	The extent of LiDAR surveying is not outlined in the Extraction Plans.	It is suggested that the extent of LiDAR is identified on monitoring figures within the extraction plans.
Subsidence Specialist	IEA OFI 29	Table 4-1 of the IUG EP LW15-16 Subsidence Monitoring Program references Longwall 15 but not Longwall 16.	Update Table 4-1 of the IUG EP LW15-16 Subsidence Monitoring Program to ensure it refers to both Longwall 15 and Longwall 16.

Appendix A

Planning Secretary Audit
Team Approval

Appendix A Planning Secretary Audit Team Approval

Chloe Piggford
Environment and Community Manager
Integra Underground
PO Box 534
Singleton NSW 2330

Via Email ONLY: chloe.piggord@glencore.com.au

06/10/2020

Dear Ms Piggford

**Integra Underground (MP08_0101)
Proposed Independent Environmental Audit Team**

I refer to your request (MP08_0101-PA-20) for the Secretary of the Department of Planning, Industry and Environment (the Department) to endorse a team of suitably qualified, experienced and independent auditors and technical specialists to undertake the 2020 Independent Environmental Audit (IEA) for the Integra Underground Mine in accordance with Schedule 5 condition 12 of MP08_0101, as modified (the approval).

The Department has reviewed the nominations and information you have provided in accordance with the requirements of the approval and the Department's *Post-approval requirements for State Significant Developments Independent Audit Guideline, October 2015* (IEA Guideline) and is satisfied these experts are suitably qualified, experienced and independent of the project.

The Department has reviewed the nominations and information you have supplied and is satisfied that these experts are suitably qualified and experienced. Consequently, I can advise that the Secretary endorses the appointment of the following audit team from AECOM Australia Pty Ltd:

- Shani Walton (Lead Auditor)
- Kate Michelmores (Auditor)
- Katherine Hutton (Groundwater Specialist)
- Amanda Kerr (Surface Water Specialist)
- Jamie McMahon (Biodiversity Specialist)
- Henk Buys (Geotechnical and Subsidence Specialist)
- Kelly Pearsall (Independent Verifier)

Please ensure this correspondence is appended to the Independent Audit Report.

The IEA must be prepared, undertaken and finalised in accordance with the approval and the IEA Guideline. Failure to meet these requirements will require revision and resubmission.

The Department reserves the right to request an alternate auditor or audit team for future audits.

Notwithstanding the agreement for the above listed audit team for this Project, each respective project approval or consent requires a request for the agreement to the auditor or audit team be submitted to the Department, for consideration of the Secretary. Each request is reviewed and depending on the complexity of future projects, the suitability of a proposed auditor or audit team will be considered.

As per Schedule 5 condition 13 of the approval, within 12 weeks of commencing this audit (i.e. from the date of the first day of the site inspection), or as otherwise agreed with the Secretary, the IEA report and the response to audit recommendations (RAR) are to be submitted to the Department via the Major Project website.

If you wish to discuss the matter further, please contact Jennifer Sage, Compliance Officer on 0400 245 170 or email to compliance@planning.nsw.gov.au

Yours sincerely

A handwritten signature in black ink, appearing to read 'H Watters', with a stylized, cursive script.

Heidi Watters
Team Leader Northern
Compliance

As nominee of the Planning Secretary

Appendix B

Audit Checklists

Appendix B Audit Checklists

Audit Checklist – DA 08_0101

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Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
SCHEDULE 2 ADMINISTRATIVE CONDITIONS					
OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT					
001	SCH2 C1	In addition to meeting the specific performance criteria established under this project approval, the Proponent must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation or rehabilitation of the project.	The auditors and specialists conducted a review of incident occurrences at the mine during the audit period, complaints received, as well as a review of the general environmental performance of the site in relation to Integra UG's various environmental management plans. Other than where issues have been identified, in general Integra UG appeared to be compliant with its obligation to minimise harm to the environment. An Environmental Management Strategy (EMS) and associated management plans and procedures have been established and generally implemented to identify, plan for and manage environmental impacts related to the operation of the Integra Underground Coal Mine (Integra UG) in order to prevent and/or minimise any potential material harm to the environment.	Compliant	
TERMS OF APPROVAL					
002	SCH2 C2	The Proponent must carry out the project generally in accordance with the: (a) previous EAs; (b) underground project EA; (c) EA Mod 1; (d) EA Mod 2; (e) EA Mod 4; (f) EA Mod 5; (g) EA Mod 6; (h) EA Mod 7; (i) EA Mod 8; and (j) project layout plan.	Integra UG's EMS and associated management plans were updated following the approval of each modification to the Project Approval. This audit addressed incorporation of the controls detailed in the modification Environmental Assessments (EAs) into the respective management plans, in particular EA Mod 8 which was approved during the audit period. Based on a high-level review of these documents, Integra UG is considered to be carrying out operations in general accordance with previous EAs, the project EA and modification EAs.	Compliant	
003	SCH2 C3	TERMS OF APPROVAL The Proponent must comply with the: (a) Statement of Commitments; and (b) conditions of this approval. <i>Notes to condition 2 and 3:</i> • Previous EAs for the project are listed in Appendix 2; • The project layout plans are shown in Appendix 3; • The Statement of Commitments is reproduced in Appendix 7; and • This project approval is intended to regulate all existing and approved development on site.	A detailed review of compliance was conducted against Integra UG's Project Approval (PA) 08_0101 and included Statement of Commitments. The results from that review are included in this checklist. Based on the results of the review the auditors concluded the following: • 8 non-compliances were identified against conditions of PA 08_0101. These were in relation to the following: ○ Consulting with Subsidence Advisory New South Wales (SANSW) before constructing a new building on site ○ Consultation with required agencies with regards to updates to management plans ○ Collecting depositional dust samples in accordance with monitoring methods specified in relevant Australian Standards ○ Controls stipulated in Ground Disturbance Permits (GDPs) not being followed. • No non-compliances were identified against the Statement of Commitments outlined in PA 08_0101. While minimal non-compliances were noted during the 2020 IEA audit period, compliance with Schedule 2, Condition 3 cannot be stated as non-compliances against the conditions of PA 08_0101 were identified. Therefore, this condition must be found not compliant.	Not Compliant LOW	Recommendation not required, refer to individual non-compliances in this checklist
004	SCH2 C4	If there is any inconsistency between the above documents then the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	This is noted.	Noted	
005	SCH2 C5	The Proponent must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: (a) any reports, strategies, plans, programs, reviews, audits, or correspondence that are submitted in accordance with the conditions of this approval; and	All evidence reviewed indicated compliance with all Department requirements. This included the revised 2018 and 2019 Annual Reviews which were requested to be resubmitted by the Department.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		(b) any reviews, reports or audits undertaken or commissioned by the Department regarding compliance with the conditions of this approval; and (c) the implementation of any actions or measures contained in these documents.	Audit findings specific to the Annual Reviews and inspections are discussed under Condition 3, Schedule 5. Requirements arising from the assessment of strategies, plans and audits are discussed under the specific requirement relating to each plan, strategy or audit.		
LIMITS OF APPROVAL					
006	SCH2 C6	Mining Operations The Proponent may carry out underground mining operations on site until 31 December 2035. <i>Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Secretary and DRG. Consequently, this approval will continue to apply in all respects - other than the right to conduct mining operations - until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.</i>	This is noted.	Noted	
007	SCH2 C7	Coal Production The Proponent must not extract more than 4.5 million tonnes of ROM coal from the underground mining operations on site in a calendar year.	Tracking of coal production is managed by the Integra UG mining engineering department. The auditors sighted the production reporting model spreadsheet for 2020 which details the daily (run-of-mine) ROM coal extraction figures. Integra UG's Environment and Community (E&C) department summarise the annual ROM coal extraction figures from the Production Reporting Model Spreadsheet and report these figures in the Annual Reviews. Annual ROM coal extraction quantities include the following for the audit period: 2018: 2,219,076 tonnes extracted 2019: 2,629,615 tonnes extracted 2020: 2,644,481 tonnes extracted (Figures provided up to 30 November 2020). Integra UG recorded extraction volumes below the limit of 4.5 million tonnes per calendar year. Evidence: - Integra UG's Production Reporting Model 2020 Spreadsheet - Annual Reviews 2018 & 2019	Compliant	
008	SCH2 C8	Coal Transport The Proponent must not transport coal from the site by public road, except in an emergency situation and with the prior written approval of the Secretary.	The auditors were informed that no coal has been transported from the site by public road in the audit period. Evidence obtained during audit interviews and site inspection showed that coal is transported to the RL100 ROM Coal Stockpile via conveyor before being hauled along an internal haul road to Rix's Creek North by Bloomfield (operator of Rix's Creek North). Processing of coal is conducted at the Bloomfield Coal Handling Preparation Plant (CHPP). Evidence: - Site Inspection - Discussion with Integra UG Personnel	Compliant	
SURRENDER OF CONSENTS AND APPROVALS					
009	SCH2 C9	By the end of June 2017, or as otherwise agreed by the Secretary, the Proponent shall surrender all existing development consents and project approvals for the site (other than this approval and the development consent for the Glennies Creek to Ashton Water Pipeline granted by Council on 13 February 2004) in accordance with Sections 75YA and 104A of the EP&A Act. <i>Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&A Act. Surrender of a consent or approval should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.</i>	Integra UG holds three legacy consents (Development Consent 105/90, Project Approval 06_0057 and Project Approval 06/0213) which are required to be surrendered as per schedule 2, condition 9. The 2017 IEA report identified that the Department had granted an extension to the relinquishment date for these consents until 31 March 2018. During this audit period the following has occurred with regards to relinquishment of the three legacy consents: - On 23 March 2018 Integra UG submitted a letter to the Department confirming that the mine commits to not undertake further development under the three legacy development consents. - Integra UG is unable to submit the consents for relinquishment as the mine is unable to obtain consent to the surrender from the required landowners. - On 25 February 2020 Integra UG requested an extension to the surrender of Development Consent 105/90, Project Approval 06_0057 and Project Approval 06/0213.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- On 12 March 2020 the Department approved a two-year extension of time to surrender the historical document consents and project approvals. The new deadline is 30 March 2022. Evidence: - Letter to the Department from Integra UG, dated 23 March 2018 'Surrender of Consents and Approvals' - Letter to the Department from Integra UG dated 25 February 2020 - 'Extension of time to Surrender Consents and Approvals'. - Letter from the Department dated 12 March 2020 – 'Extension of time to Surrender Consents and Approvals'.		
010	SCH2 C10	Prior to the surrender of these consents and/or approvals, the conditions of this approval (including any notes) shall prevail to the extent of any inconsistency with the conditions of these consents and/or approvals.	This is noted.	Noted	
STRUCTURAL ADEQUACY					
011	SCH2 C11	The Proponent must ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA and SANSW. <i>Notes:</i> - Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; - Part 8 of the EP&A Regulation sets out the requirements for the certification of the project; and - The project is located in the Patrick Plains Mine Subsidence District. Under Section 15 of the Mine Subsidence Compensation Act 1961, the Proponent is required to obtain the SANSW's approval before constructing or relocating any improvements on site.	During the audit period (29 November 2017 to 3 December 2020) one new building was constructed. The building is a transportable structure utilised in the administrative/office section of the mine. The building was constructed in 2019 and was being used as the office space for Integra UG's E&C department. The building includes office space, bathrooms and kitchen facilities. Compliance with the BCA Integra UG engaged Bureau Veritas Australia Pty Ltd in 2020 to assess the building structure against the requirements of the BCA. The auditors sighted a report from Bureau Veritas Australia Pty Ltd, dated 19 June 2020, which confirmed the building complied with the BCA. Compliance with SANSW The auditors sighted a letter from SANSW, dated 30 October 2020, advising that Integra UG's construction of the additional building was exempt from requiring approval from SANSW under Sections 21, 22 and 23 of Part 3 of the <i>Mine Subsidence Compensation Act 1961</i>. Integra UG commenced consultation with SANSW after construction of the new building was completed. Notes provided under Schedule 2, Condition 11 of PA 08_0101 requires that SANSW's approval be obtained before constructing or relocating any improvements on site. As exemption from the SANSW was received in 2020, post construction, this condition is not compliant. No other buildings or structures were constructed or altered during the audit period. Evidence: - Report from Bureau Veritas Australia Pty Ltd, dated 19 June 2020 – 'Compliance inspection of environmental demountable building'. - Letter from SANSW dated 30 October 2020 - 'EOTH20-00124 – 640 Middle Fallbrook Rd, Glennies Creek'.	Not Compliant ADMIN NC	Recommendation not required as the construction conducted was exempt from requiring approval from SANSW under Sections 21, 22 and 23 of Part 3 of the Mine Subsidence Compensation Act 1961. Integra UG track compliance requirements in the online compliance database CMO which includes this requirement, so as to prevent a reoccurrence of this in future.
DEMOLITION					
012	SCH2 C12	The Proponent must ensure that all demolition work is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.	Construction of the new building as outlined under schedule 2, condition 11 above required demolition of the existing brick dwelling in that location. Integra UG engaged Blue Chip Specialised Services to conduct asbestos removal and demolition services. Demolition work commenced on 9 March 2019 and was concluded on 10 March 2019. A report was provided for review showing demolition progress photos and detailed description of the asbestos removal work undertaken. . The auditors conducted a review of authorised asbestos and demolition licence holders on the SafeWork NSW website and verified that Blue Chip Specialised Services are listed as a licenced demolition licence holder (Licence No. AD213358).	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			The demolition report does not specifically make reference to AS 2601-2001 however, on the basis that Blue Chip Specialised Services are licenced demolition contractors with SafeWork NSW, and evidence has been provided showing demolition progress and completion the auditors have found this condition to be compliant. Evidence: - Report from Blue Chip Specialist Services, dated 27 March 2019 - SafeWork NSW Asbestos and Demolition Licence (ADL) Holders List, accessed 16 January 2021, https://www.safework.nsw.gov.au/asbestos-and-demolition-licence-holders/adl-holders		
013	SCH2 C13	Unless the Proponent and the applicable authority agree otherwise, the Proponent must: (a) repair or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project, except where impacts to such works have otherwise been fully compensated through the compensation provisions of the Mining Act 1992.	(a) Integra UG stated to the auditors that no damage was caused to public infrastructure by Integra UG's operations during the audit period. (b) Integra UG stated to the auditors that no relocation of any public infrastructure was required during the audit period. The auditors reviewed Integra UG's complaints and incident databases for the audit period and conducted an inspection of the mine between 01 and 03 December 2020. No evidence was obtained which indicated damage to or relocation of public infrastructure occurred during the audit period. The auditors conclude that schedule 2, condition 13 had not been triggered during the audit period.	Not Triggered	
014	SCH2 C14	The Proponent must ensure that all the plant and equipment used on site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	(a) Maintenance of plant and equipment Maintenance of plant and equipment at Integra UG is conducted in accordance with Glencore's 'Asset Management Framework'. The framework is a 17-element system which stipulates requirements from planning and procurement to maintenance and disposal. Glencore requires all sites to use SAP, which is a maintenance planning system that tracks manufacturer servicing and inspection requirements as well as other service and inspection intervals. The auditors verified that Integra UG uses SAP to manage maintenance requirements for all mining equipment and plant. SAP generates work orders for maintenance as required by the equipment or plant maintenance requirements. Mobile plant servicing is based on the number of hours operated. Stationary plant and equipment servicing is based on a calendar schedule. The auditors conducted a review of the maintenance of equipment related to environmental management of the site and noted the following: - Glencore Corporate has a group contract with Novecom to supply, inspect and maintain the real time monitoring network (noise and dust monitors) at all Glencore mines in New South Wales. Novecom implements an inspection and maintenance schedule in accordance with the relevant Australian standard. Examples of calibration certificates and service reports were sighted by the auditors. - The Meteorological Station is maintained by CBased Environmental. Annual inspection and calibration certificates were sighted by the auditors. - Two oil water separators are operational on site, including a separator at the portal wash down area and a separator at the mine workshop. The auditors reviewed the maintenance schedule for the oil water separator located in the portal area. - Specialist consultant's Umwelt Environmental & Social Consultants (Umwelt) are engaged by Integra UG to conduct attended noise monitoring. Certificates of calibration for the Sound & Vibration Analyzer and sound level calibrator were sighted by the auditors. - Waste and spill containment equipment is maintained by J.R Richards. Spill containment equipment was sighted by the auditors during the site inspection. (b) Operation of plant and equipment An environmental induction (General Environmental Awareness) is presented to all personnel during site induction, as part of the overall site familiarisation. The environmental induction includes	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation								
			references to site approvals and licences and outlines workers’ environmental responsibilities including incident reporting and key environmental risks and mitigation measures. Only qualified and inducted personnel are permitted to operate specific plant and equipment on site. Integra UG maintains a stringent training and approval process with regards to operation of light vehicles in the pit area and operation of mine specific vehicles and plant. Evidence: - Glencore Asset Management Portal (sighted on intranet) - Glencore – Element 4, Equipment Maintenance Strategy - Site Inspection - SAP records - Maintenance Order 101624157, Oil Water Separator, dated 30 January 2019 - Calibration Certificate No. SL 22355 & FILT 4741										
SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS													
ACQUISITION UPON REQUEST													
015	SCH3 C1	Upon receiving a written request for acquisition from an owner of the land containing a residential receiver listed in Table 1, the Proponent must acquire the land in accordance with the procedures in conditions 7 and 8 of Schedule 4. Table 1 <table><tr><th>Residential Receiver No.</th><th>Acquisition Basis</th></tr><tr><td>47 – B & R Cherry</td><td>Subsidence and Air Quality</td></tr><tr><td>80 – G Donnellan</td><td>Noise</td></tr><tr><td>153 – R & D Hall</td><td>Noise</td></tr></table> For the purposes of acquisition under this condition, parcels of land that are in close proximity and operated as a single agricultural enterprise by the owner of a listed residential receiver should be included as part of the land to be acquired. Where the Proponent and the owner(s) cannot agree whether non-contiguous parcels of land should be included, either party may refer the matter to the Secretary for resolution. The Secretary’s decision as to the lands to be included for acquisition under the procedures in conditions 7 and 8 of Schedule 4 shall be final. Acquisition rights in Table 1 for receiver 153 only has 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. <i>Note: To interpret the locations referred to in Table 1, see the applicable figures in Appendix 4.</i>	Residential Receiver No.	Acquisition Basis	47 – B & R Cherry	Subsidence and Air Quality	80 – G Donnellan	Noise	153 – R & D Hall	Noise	Integra UG received one written request for acquisition from the landowner at Residential Receiver No. 47, as identified in Table 1. of PA 08_0101. The auditors sighted the following evidence regarding this acquisition request: - On 1 November 2019 Integra UG received a request to commence the land acquisition process for Residential Receiver No. 47. - On 3 December 2019 Integra UG replied with an offer of acquisition. - On 14 December 2019 the landowner accepted the acquisition price proposed. Evidence: - Email from the landowner at Residential Receiver No. 47 to Integra UG seeking acquisition, dated 1 November 2019 - Letter from Integra UG to the landowner at Residential Receiver No. 47, dated 3 December 2019 (limited content sighted due to confidentiality).	Compliant	
Residential Receiver No.	Acquisition Basis												
47 – B & R Cherry	Subsidence and Air Quality												
80 – G Donnellan	Noise												
153 – R & D Hall	Noise												
NOISE													
016	SCH3 C2	Noise Criteria 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.	Integra UG’s Noise Management Plan (NMP) outlines that attended noise monitoring results are to be utilised to determine compliance with Project Approval and Environmental protection Licence (EPL) criteria. It is noted that the Department approved the NMP, which states that noise monitoring will be conducted at a representative sample of monitoring locations to assess compliance with noise criteria. As a result, monitoring is not conducted at all locations specified in the EPL and Project Approval. Attended Noise Monitoring Integra UG engaged Umwelt to conduct attended noise monitoring during the audit period, in accordance with the NMP.	Compliant									

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation																																																																																																																																																																											
		Table 2 <table><tr><th rowspan="2">Location</th><th>Day</th><th>Evening</th><th>Night</th><th>Night</th></tr><tr><th>L_{Aeq}(15min)</th><th>L_{Aeq}(15min)</th><th>L_{Aeq}(15min)</th><th>L_{A1}(1min)</th></tr><tr><td>NAG 1</td><td>All privately-owned land</td><td>38</td><td>38</td><td>36</td><td>46</td></tr><tr><td>NAG 2</td><td>All privately-owned land</td><td>39</td><td>39</td><td>37</td><td>47</td></tr><tr><td>NAG 3</td><td>87</td><td>42</td><td>42</td><td>42</td><td>49</td></tr><tr><td></td><td>106</td><td>39</td><td>39</td><td>39</td><td>49</td></tr><tr><td></td><td>All other privately-owned land</td><td>40</td><td>40</td><td>39</td><td>49</td></tr><tr><td>NAG 4</td><td>88, 91, 95, 99, 100, 105, 161</td><td>35</td><td>35</td><td>35</td><td>47</td></tr><tr><td></td><td>All other privately-owned land</td><td>42</td><td>42</td><td>37</td><td>47</td></tr><tr><td>NAG 5</td><td>111</td><td>37</td><td>37</td><td>37</td><td>52</td></tr><tr><td></td><td>112</td><td>36</td><td>36</td><td>36</td><td>52</td></tr><tr><td></td><td>118</td><td>39</td><td>39</td><td>39</td><td>52</td></tr><tr><td></td><td>154</td><td>36</td><td>36</td><td>36</td><td>52</td></tr><tr><td></td><td>103, 104, 121, 139</td><td>35</td><td>35</td><td>35</td><td>52</td></tr><tr><td></td><td>All other privately-owned land</td><td>50</td><td>46</td><td>42</td><td>52</td></tr><tr><td>NAG 6</td><td>132, 133, 137</td><td>35</td><td>35</td><td>35</td><td>48</td></tr><tr><td></td><td>All other privately-owned land</td><td>41</td><td>41</td><td>38</td><td>48</td></tr><tr><td>NAG 7</td><td>110</td><td>38</td><td>38</td><td>38</td><td>49</td></tr><tr><td></td><td>All other privately-owned land</td><td>45</td><td>42</td><td>39</td><td>49</td></tr><tr><td>NAG 8</td><td>142</td><td>35</td><td>35</td><td>35</td><td>45</td></tr><tr><td></td><td>All other privately-owned land</td><td>42</td><td>42</td><td>35</td><td>45</td></tr><tr><td>NAG 9</td><td>2, 3, 4, 143, 144, 145, 146, 147, 48, 149, 150, 151, 152</td><td>35</td><td>35</td><td>35</td><td>48</td></tr><tr><td></td><td>All other privately-owned land</td><td>40</td><td>40</td><td>38</td><td>48</td></tr><tr><td>NAG 10</td><td>10</td><td>42</td><td>42</td><td>42</td><td>47</td></tr><tr><td></td><td>9</td><td>41</td><td>41</td><td>41</td><td>47</td></tr><tr><td></td><td>11, 13</td><td>40</td><td>40</td><td>40</td><td>47</td></tr><tr><td></td><td>8</td><td>38</td><td>38</td><td>38</td><td>47</td></tr><tr><td></td><td>6</td><td>36</td><td>36</td><td>36</td><td>47</td></tr><tr><td></td><td>5</td><td>35</td><td>35</td><td>35</td><td>47</td></tr></table> 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. 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. 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. <i>Note: To interpret the locations referred to in Table 2, see the applicable figures in Appendix 4.</i>	Location	Day	Evening	Night	Night	L _{Aeq} (15min)	L _{Aeq} (15min)	L _{Aeq} (15min)	L _{A1} (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	45	42	39	49	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, 48, 149, 150, 151, 152	35	35	35	48		All other privately-owned land	40	40	38	48	NAG 10	10	42	42	42	47		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	Attended noise monitoring is required to be conducted quarterly however, during construction of the infrastructure associated with MOD 8, attended noise monitoring was conducted on a monthly basis. It is noted that the Department approved the use of representative monitoring locations to assess compliance with noise criteria. These locations are consistent with EPL requirements and are representative of those Noise Assessment Groups (NAGs) that retain private properties or ‘any other private land’, as identified in Table 2 of PA08_0101. This is outlined in section 4.2 and Figure 2 of the NMP. The auditors sighted the following evidence to verify compliance with schedule 3, condition 2: - Environmental noise monitoring reports prepared by Umwelt (2017-2020) - Noise data published in the 2017, 2018 and 2019 Annual Reviews, which concluded the following: 2017: Integra UG’s operations were inaudible throughout all monitoring periods. 2018: Integra UG’s operations were inaudible throughout all monitoring periods. 2019: Integra UG’s operations were inaudible throughout most monitoring periods and below criteria when audible. - Integra UG’s Quarterly Environmental Monitoring Reports (2017-2020) - Raw data available in Integra UG’s Environmental Monitoring Database (EMD) Unattended Noise Monitoring Mount Owen Complex (MOC) operates an extensive real-time noise monitoring network, which surrounds Integra UG’s operations. This unattended noise monitoring is used as a noise management tool by Integra UG to proactively manage noise by modifying mining operations as required, should a trigger level be reached. Conclusion The approach to using attended noise monitoring for assessing compliance with criteria and unattended real time monitoring as a management tool is widely accepted and used by the mining industry. Furthermore, this approach is clearly documented in the NMP, on which the EPA was consulted, and which was approved by the Department. No exceedances of noise criteria were recorded during the audit period. In some instances, audible noise levels were recorded; however, in all instances the results indicate that noise levels recorded were below the compliance criteria. Evidence: - Annual Reviews 2018 & 2019 - Letter from the Department approving the Noise Management Plan, dated 26 July 2019 - EMD Noise data (Sighted) - Environmental noise monitoring reports, Umwelt 2017-2020 - Integra UG Complaints Register (audit period) - Integra UG Incident Register (audit period)		
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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	45	42	39	49																																																																																																																																																																											
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, 48, 149, 150, 151, 152	35	35	35	48																																																																																																																																																																											
	All other privately-owned land	40	40	38	48																																																																																																																																																																											
NAG 10	10	42	42	42	47																																																																																																																																																																											
	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																																																																																																																																																																											
017	SCH3 C2A	Construction Noise 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 Interim Construction Noise Guideline. 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 LAeq(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 LAeq(15min) noise	Construction during the audit period <i>Modification 7:</i> Construction of the water sharing pipeline between MOC and Integra UG commenced in September 2017 (approx. 3 months prior to the start of the audit period) and was completed in December 2017 (approx. one month after the start of the audit period). - Construction of associated infrastructure under MOD 7 was completed during the audit period. <i>Modification 8:</i> Ventilation shaft 3 construction works were commenced in 2019 and completed in 2020. A summary of the construction completed during the audit period is provided in the main 2020 IEA report.	Compliant																																																																																																																																																																												

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		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.	Construction Noise Evidence Review To verify compliance with schedule 3, condition 2A the auditors noted the following during their review: - The NMP was updated to include mitigation measures specific to modifications 7 and 8. During the audit period the Department approved the NMP on 10 September 2018 following its review and update in response to the approval of Modification 8 of PA 08_0101 - A Construction Work Noise Protocol, as detailed in Section 2.2.5 of the NMP, was not required to be prepared as an alternative temporary limit for construction noise was not required, based on discussion with the E&C Coordinator. - The location of construction works during the audit period (water supply pipeline, associated infrastructure and ventilation shaft 3) was generally in close proximity to MOC and away from the residential properties. - Quarterly attended noise monitoring was undertaken during the audit period, in accordance with the NMP. - Monthly attended noise monitoring was undertaken, in lieu of quarterly noise monitoring, when construction activities occurred during evening or night periods. - During the audit period, Integra UG's noise monitoring results, including combined operational and construction noise levels summarised by Umwelt in their reports, indicated that noise levels were inaudible throughout most monitoring periods and did not exceed noise criteria when audible. - Complaints and incidents recorded during the audit period were reviewed. No complaints or incidents were recorded in relation to noise. Evidence: - Environmental noise monitoring report, Summer 2017-2018, Umwelt April 2017 - Annual Reviews 2018 & 2019 - Integra UG Noise Management Plan - EMD Noise data (Sighted) - Environmental noise monitoring reports, Umwelt 2017-2020 - Integra UG Complaints Register (audit period) - Integra UG Incident Register (audit period)		
018	SCH3 C2B	Construction Noise 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: (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. 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.	This condition was not triggered during the audit period.	Not Triggered	
019	SCH3 C3	Noise Acquisition Criteria 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	This condition was not triggered during the audit period.	Not Triggered	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation																																																																																			
		landowner, the Proponent must acquire the land in accordance with the procedures in conditions 7 and 8 of Schedule 4. Table 3 <table><tr><th rowspan="2">Location</th><th>Day</th><th>Evening</th><th>Night</th></tr><tr><th>L_{Aeq}(15min)</th><th>L_{Aeq}(15min)</th><th>L_{Aeq}(15min)</th></tr><tr><td>All privately-owned land in NAG 1</td><td>44</td><td>44</td><td>42</td></tr><tr><td>All privately-owned land in NAG 2</td><td>45</td><td>45</td><td>43</td></tr><tr><td>All privately-owned land in NAG 3</td><td>46</td><td>46</td><td>45</td></tr><tr><td>All privately-owned land in NAG 4</td><td>48</td><td>48</td><td>43</td></tr><tr><td>All privately-owned land in NAG 5</td><td>56</td><td>52</td><td>48</td></tr><tr><td>All privately-owned land in NAG 6</td><td>47</td><td>47</td><td>44</td></tr><tr><td>All privately-owned land in NAG 7</td><td>51</td><td>48</td><td>45</td></tr><tr><td>All privately-owned land in NAG 8</td><td>48</td><td>48</td><td>41</td></tr><tr><td>All privately-owned land in NAG 9</td><td>46</td><td>46</td><td>44</td></tr><tr><td>All privately-owned land in NAG 10</td><td>45</td><td>45</td><td>43</td></tr><tr><td>All privately-owned land in NAG 11</td><td>47</td><td>47</td><td>45</td></tr><tr><td>All privately-owned land in NAG 12</td><td>44</td><td>44</td><td>41</td></tr><tr><td>All privately-owned land in NAG A</td><td>45</td><td>45</td><td>42</td></tr><tr><td>All privately-owned land in NAG B</td><td>43</td><td>43</td><td>41</td></tr><tr><td>All privately-owned land in NAG C</td><td>43</td><td>43</td><td>41</td></tr><tr><td>All privately-owned land in NAG D</td><td>46</td><td>46</td><td>44</td></tr><tr><td>All privately-owned land in NAG F</td><td>46</td><td>46</td><td>46</td></tr><tr><td>All privately-owned land in NAG G</td><td>47</td><td>47</td><td>45</td></tr><tr><td>All other privately-owned land</td><td>41</td><td>41</td><td>41</td></tr></table> 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. 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. Notes: • To interpret the locations referred to in Table 3, see the applicable figures in Appendix 4; and • For this condition to apply, the exceedances of the criteria must be systemic.	Location	Day	Evening	Night	L _{Aeq} (15min)	L _{Aeq} (15min)	L _{Aeq} (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			
Location	Day	Evening		Night																																																																																				
	L _{Aeq} (15min)	L _{Aeq} (15min)	L _{Aeq} (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																																																																																					
020	SCH3 C4	Cumulative Noise Criteria 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. Table 4 <table><tr><th>Location</th><th>Day</th><th>Evening</th><th>Night</th></tr><tr><td>NAGs 4, 5, 8 and 9</td><td>55</td><td>45</td><td>40</td></tr><tr><td>All other privately-owned land</td><td>50</td><td>45</td><td>40</td></tr></table> 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. 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. Note: To interpret the locations referred to in Table 4, see the applicable figures in Appendix 4.	Location	Day	Evening	Night	NAGs 4, 5, 8 and 9	55	45	40	All other privately-owned land	50	45	40	The NMP was prepared in consultation with the owners of nearby mines (including Ashton, Rix’s Creek North, Rix’s Creek Glendell Wambo and MOC) to ensure cumulative noise impacts were adequately considered. Evidence of consultation with neighbouring mines was sighted by the auditors. It is noted that, as an operational underground mine, Integra UG makes a relatively low contribution to cumulative noise levels in comparison to the other mines, most of which are open cut mines. Integra UG has prepared a protocol in consultation with the mines to minimise cumulative noise impacts. This includes a quarterly meeting involving E&C representatives for each of the mines; a cumulative trigger action response plan (TARP) which can be activated if attended monitoring indicates an exceedance of the cumulative noise criteria; and additional noise mitigation measures, including: • Operation of a real-time unattended noise monitoring network to assist with noise impact monitoring (should a noise level criteria exceedance occur; this would be verified by attended noise monitoring prior to activating the TARP). • Annual sound power testing of static noise generating sources. • Procurement and operation of plant and equipment considering the level of noise generated. • Installation of sound attenuating controls on noise generating plant and equipment, including broadband reversing alarms on mine equipment and light vehicles. Attended noise monitoring is conducted by external consultant Umwelt. The external noise monitoring reports show that monitoring is conducted in accordance with the mine’s NMP and the NSW Environment Protection Authority (EPA) Industrial Noise Policy (INP) (2000) guidelines and	Compliant																																																																								
Location	Day	Evening	Night																																																																																					
NAGs 4, 5, 8 and 9	55	45	40																																																																																					
All other privately-owned land	50	45	40																																																																																					

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation												
			the Australian Standard AS1055-1997, Acoustics – Description and Measurement of Environmental Noise, Part 1 General Procedures. Monitoring results obtained from attended noise monitoring conducted by Umwelt show that cumulative noise levels were below the criteria specified in schedule 3, condition 4 across all locations during the audit period. Evidence: • Annual Reviews 2018 & 2019 • Integra UG Noise Management Plan • EMD Noise data (Sighted) • Environmental noise monitoring reports, Umwelt 2017-2020 • Integra UG Complaints Register (audit period) • Integra UG Incident Register (audit period) • Inter-mine meeting minutes, dated 28 September 2020 • Sound Power Level Testing Report, Umwelt May 2020														
021	SCH3 C5	Cumulative Noise Acquisition Criteria 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. Table 5 <table><tr><th>Location</th><th>Day</th><th>Evening</th><th>Night</th></tr><tr><td>NAGs 4, 5, 8 and 9</td><td>60</td><td>50</td><td>45</td></tr><tr><td>All other privately-owned land</td><td>55</td><td>50</td><td>45</td></tr></table> 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. Notes: • To interpret the locations referred to in Table 5, see the applicable figures in Appendix 4; and • For these conditions to apply, the exceedances of the criteria must be systemic.	Location	Day	Evening	Night	NAGs 4, 5, 8 and 9	60	50	45	All other privately-owned land	55	50	45	This condition was not triggered during the audit period.	Not Triggered	
Location	Day	Evening	Night														
NAGs 4, 5, 8 and 9	60	50	45														
All other privately-owned land	55	50	45														
022	SCH3 C6	Additional Noise Mitigation Measures Upon receiving a written request from the owner of any residence: (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. 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. Table 6 <table><tr><td>11 – F Ferraro</td><td>64 – W & A Gardner</td></tr><tr><td>87 – B & R Richards</td><td></td></tr></table>	11 – F Ferraro	64 – W & A Gardner	87 – B & R Richards		This condition was not triggered during the audit period.	Not Triggered									
11 – F Ferraro	64 – W & A Gardner																
87 – B & R Richards																	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation																																																																																			
		<i>Note: To interpret the locations referred to in Table 6, see the applicable figures in Appendix 4.</i> Table 7 <table><tr><th rowspan="2">Location</th><th>Day</th><th>Evening</th><th>Night</th></tr><tr><th>L_{Aeq}(15min)</th><th>L_{Aeq}(15min)</th><th>L_{Aeq}(15min)</th></tr><tr><td>All privately-owned land in NAG 1</td><td>41</td><td>41</td><td>39</td></tr><tr><td>All privately-owned land in NAG 2</td><td>42</td><td>42</td><td>40</td></tr><tr><td>All privately-owned land in NAG 3</td><td>43</td><td>43</td><td>42</td></tr><tr><td>All privately-owned land in NAG 4</td><td>45</td><td>45</td><td>40</td></tr><tr><td>All privately-owned land in NAG 5</td><td>53</td><td>49</td><td>45</td></tr><tr><td>All privately-owned land in NAG 6</td><td>44</td><td>44</td><td>41</td></tr><tr><td>All privately-owned land in NAG 7</td><td>48</td><td>45</td><td>42</td></tr><tr><td>All privately-owned land in NAG 8</td><td>45</td><td>45</td><td>38</td></tr><tr><td>All privately-owned land in NAG 9</td><td>43</td><td>43</td><td>41</td></tr><tr><td>All privately-owned land in NAG 10</td><td>42</td><td>42</td><td>40</td></tr><tr><td>All privately-owned land in NAG 11</td><td>44</td><td>44</td><td>42</td></tr><tr><td>All privately-owned land in NAG 12</td><td>41</td><td>41</td><td>38</td></tr><tr><td>All privately-owned land in NAG A</td><td>42</td><td>42</td><td>39</td></tr><tr><td>All privately-owned land in NAG B</td><td>40</td><td>40</td><td>38</td></tr><tr><td>All privately-owned land in NAG C</td><td>40</td><td>40</td><td>38</td></tr><tr><td>All privately-owned land in NAG D</td><td>43</td><td>43</td><td>41</td></tr><tr><td>All privately-owned land in NAG F</td><td>43</td><td>43</td><td>43</td></tr><tr><td>All privately-owned land in NAG G</td><td>44</td><td>44</td><td>42</td></tr><tr><td>All other privately-owned land</td><td>38</td><td>38</td><td>38</td></tr></table> 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. 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. <i>Notes:</i> • To interpret the locations referred to in Table 7, see the figures in Appendix 4; and • For these conditions to apply, the exceedances of the criteria must be systemic.	Location	Day	Evening	Night	L _{Aeq} (15min)	L _{Aeq} (15min)	L _{Aeq} (15min)	All privately-owned land in NAG 1	41	41	39	All privately-owned land in NAG 2	42	42	40	All privately-owned land in NAG 3	43	43	42	All privately-owned land in NAG 4	45	45	40	All privately-owned land in NAG 5	53	49	45	All privately-owned land in NAG 6	44	44	41	All privately-owned land in NAG 7	48	45	42	All privately-owned land in NAG 8	45	45	38	All privately-owned land in NAG 9	43	43	41	All privately-owned land in NAG 10	42	42	40	All privately-owned land in NAG 11	44	44	42	All privately-owned land in NAG 12	41	41	38	All privately-owned land in NAG A	42	42	39	All privately-owned land in NAG B	40	40	38	All privately-owned land in NAG C	40	40	38	All privately-owned land in NAG D	43	43	41	All privately-owned land in NAG F	43	43	43	All privately-owned land in NAG G	44	44	42	All other privately-owned land	38	38	38			
Location	Day	Evening		Night																																																																																				
	L _{Aeq} (15min)	L _{Aeq} (15min)	L _{Aeq} (15min)																																																																																					
All privately-owned land in NAG 1	41	41	39																																																																																					
All privately-owned land in NAG 2	42	42	40																																																																																					
All privately-owned land in NAG 3	43	43	42																																																																																					
All privately-owned land in NAG 4	45	45	40																																																																																					
All privately-owned land in NAG 5	53	49	45																																																																																					
All privately-owned land in NAG 6	44	44	41																																																																																					
All privately-owned land in NAG 7	48	45	42																																																																																					
All privately-owned land in NAG 8	45	45	38																																																																																					
All privately-owned land in NAG 9	43	43	41																																																																																					
All privately-owned land in NAG 10	42	42	40																																																																																					
All privately-owned land in NAG 11	44	44	42																																																																																					
All privately-owned land in NAG 12	41	41	38																																																																																					
All privately-owned land in NAG A	42	42	39																																																																																					
All privately-owned land in NAG B	40	40	38																																																																																					
All privately-owned land in NAG C	40	40	38																																																																																					
All privately-owned land in NAG D	43	43	41																																																																																					
All privately-owned land in NAG F	43	43	43																																																																																					
All privately-owned land in NAG G	44	44	42																																																																																					
All other privately-owned land	38	38	38																																																																																					
023	SCH3 C7	Additional Noise Mitigation Measures 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 as equitable basis as possible with the relevant mines. 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. Table 8 <table><tr><th>Location</th><th>Day</th><th>Evening</th><th>Night</th></tr><tr><td>NAGs 4, 5, 8 and 9</td><td>57</td><td>47</td><td>42</td></tr><tr><td>All other privately owned land</td><td>52</td><td>47</td><td>42</td></tr></table> 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. <i>Notes:</i> • To interpret the locations referred to in Table 8, see the figures in Appendix 4; and • For these conditions to apply, the exceedances of the criteria must be systemic.	Location	Day	Evening	Night	NAGs 4, 5, 8 and 9	57	47	42	All other privately owned land	52	47	42	This condition was not triggered during the audit period.	Not Triggered																																																																								
Location	Day	Evening	Night																																																																																					
NAGs 4, 5, 8 and 9	57	47	42																																																																																					
All other privately owned land	52	47	42																																																																																					

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
024	SCH3 C8	Operating Conditions The Proponent must: (a) 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;	As an operational underground mine, noise sources are generally limited to the following: • Ventilation fans • Compressor and gas flares • Haulage of coal from the ROM coal stockpile to the project boundary • Surface disturbance works, e.g. construction work, exploration activities, gas drainage work and remediation work. Noise Management System Integra UG operates a comprehensive Noise Management System that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations. The real time noise monitor (Sentinex) is located at the nearby Glencore MOC and the Glendell meteorological station is utilised to monitor meteorological conditions. The real time noise monitoring network provides a daily summary of noise monitoring data to selected personnel, including the E&C department and key operational staff. SMS triggers are sent when a measured noise level is reached. E&C Risk Assessment Best practice mitigation measures are reviewed annually as part of the E&C risk assessment process. Inputs to the E&C risk register are obtained from the following: • Baseline environmental studies • Review of environmental performance date • Review of existing or proposed changes to the operations • Review of relevant legislation, standards, codes of practice or additional external requirements • Industry experience • Relevant stakeholders. Noise is identified on the risk register with regards to mining operations impacting nearby receptors or generation of unacceptable noise levels. The risk assessment notes that attended noise monitoring results to date have indicated that Integra UG is generally inaudible at nearby receiver locations, and on occasion noise levels are audible but below noise criteria limits. It has been noted in the risk assessment that a revision of the noise exceedance response procedure is required in order to clarify response actions and responsibilities and to provide training to relevant personnel once complete. The auditors were provided evidence that the Noise Response Procedure had been updated in July 2020. Training records were provided showing Integra UG employees were assessed on the requirements of noise exceedance response procedure. Conclusion Noise mitigation measures implemented on site are outlined in the site's NMP. These controls were reviewed in detail as part of the management plans implementation review. Monitoring results, complaints and incident occurrences indicate that noise levels generated by the mine are minimal and suggest that all reasonable and feasible noise mitigation measures, to minimise the construction, operational and low frequency noise generated by the mine have been implemented. Evidence: • Environmental & Community Risk Register, dated 30 June 2020 • Annual Reviews 2018 & 2019 • Integra UG Noise Management Plan	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			• EMD Noise data (Sighted) • Environmental noise monitoring reports, Umwelt 2017-2020 • Integra UG Noise Exceedance Response Procedure, INTUG-793190785-1025, Version 5.0, dated 23 July 2020 • Noise Management Training Assessments 2018 • Integra UG Complaints Register (audit period) • Integra UG Incident Register (audit period)		
025	SCH3 C8(b)	Operating Conditions The Proponent must: (b) 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 this approval;	Integra UG operates a comprehensive Noise Management System that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations. The real time noise monitor (Sentinex) is located at the nearby Glencore MOC and the Glendell meteorological station is utilised to monitor meteorological conditions. The real time noise monitoring network provides a daily summary of noise monitoring data to selected personnel including the E&C department and key operational staff. SMS triggers are sent when a measured noise level be reached. Integra UG have in place a Noise exceedance Response Procedure which is enacted should a real-time monitor record a trigger alarm. Training has been completed by relevant personnel with regards to implementation of this procedure. The auditors conclude that Integra UG is operating a comprehensive noise management system. While opportunities for improvement have been made, attended monitoring results indicate that Integra UG is complying with noise criteria specified in PA 08_0101 and the site's EPL. Evidence: • Integra UG Noise Management Plan • Integra UG Noise Exceedance Response Procedure, INTUG-793190785-1025, Version 5.0, dated 23 July 2020 • Noise Management Training Assessments 2018 • Environmental & Community Risk Register, dated 30 June 2020 • Environmental noise monitoring reports, Umwelt 2017-2020 • Integra UG Complaints Register (audit period) • Integra UG Incident Register (audit period)	Compliant	
026	SCH3 C8(c)	Operating Conditions The Proponent must: (c) implement all reasonable and feasible measures to minimise the release of noise emissions from noisy plant and equipment on site;	Integra UG implemented the following controls to minimise the release of noise emissions from noisy plant and equipment: • Annual sound emissions testing program of static noise sources including ventilation fans is conducted to monitor any changes in sound emissions over time. The auditors reviewed the sound power level testing reports prepared by Umwelt in 2018, 2019 and 2020. The total sound power level results recorded were below the predicted levels estimated in the noise impact assessment conducted by ERM in 2009. • Use of attended and unattended noise monitoring as detailed above. No exceedances of noise criteria were recorded during the audit period. • Procurement and operation of plant and equipment consider the level of noise generated. • Installation of sound attenuating controls on noise generating plant and equipment, including broadband reversing alarms on mine equipment and light vehicles. • Operation of a community information / complaints line. No community complaints were received during the audit period in relation to noise. • Operation of an internal incident reporting process. No incidents (reportable or non-reportable) were recorded in the CMO incident database during the audit period.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			In addition to the above implemented controls, it is noted that majority of Integra UG's operations are below the ground surface or in the portal area. In addition, the ventilation fan sites are located a significant distance from the closest private residence. As such, Integra UG rarely need to alter or restrict operations in order to reduce noise emissions. Conclusion Based on the evidence reviewed, Integra UG are considered to have implemented all reasonable and feasible measures to minimise the release of noise emissions from noisy plant and equipment on site at the time of the audit. Evidence: - Sound power Level Testing Report, Integra UG ventilation facility, Umwelt, May 2020 - Sound emissions testing report, Integra UG ventilation fan facility, Umwelt February 2018 - Sound power level testing report, Integra UG ventilation facility, Umwelt February 2019		
027	SCH3 C8(d)	Operating Conditions The Proponent must: (d) minimise the noise impacts of the project during meteorological conditions under which the noise limits of this approval do not apply (see Appendix 5); and	Integra UG monitors weather conditions via the Glendell meteorological station and obtains a daily weather forecasting report to assist operations in the prediction of likely adverse meteorological conditions that have the potential to exacerbate noise levels. These daily forecast reports are reviewed and discussed on a daily basis at the Senior daily leadership meetings. Evidence: - Discussion with Integra UG E&C Coordinator - Sentinex weather station calibration report, dated 07 May 2020 - Integra UG Noise Management Plan	Compliant	
028	SCH3 C8(e)	Operating Conditions The Proponent must: (e) co-ordinate the noise management on site with noise management at nearby mines (including Ashton, Rix's Creek North, Rix's Creek and the Mount Owen Complex) to minimise cumulative noise impacts,	Integra UG has prepared a protocol in consultation with nearby mines (including Ashton, Rix's Creek North, Rix's Creek Glendell, Wambo and MOC) to minimise cumulative noise impacts. This includes a quarterly meeting involving E&C representatives for each of the mines; a cumulative trigger action response plan (TARP) which can be activated if attended monitoring indicates an exceedance of the cumulative noise criteria. The auditors reviewed meeting minutes from the inter-mine meetings conducted between Integra UG, MOC, Ashton, Rix's Creek and Wambo mines. Item 1 on the agenda requires cumulative impacts to be discussed in relation to air quality, noise, blasting, bushfire management and community. In general, no matters were required to be raised by Integra UG with regards to noise emissions. Evidence: - Integra UG Noise Management Plan - Inter-Mine Meeting minutes, dated 28 September 2020	Compliant	
029	SCH3, C8	to the satisfaction of the Secretary.	Assessing Department Satisfaction The auditors consider that the operating conditions for noise management at Integra UG are to the satisfaction of the Department on the following basis: - The Department stated that they were satisfied that the NMP adequately addressed the site's consent conditions following their review, on 26 July 2019. - Integra UG reports its environmental performance with regards to noise in its Annual Review, which is submitted to the Department. - Consultation with the Department prior to the commencement of the IEA did not highlight any regulatory interest in noise management across the site.		

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
030	SCH3 C9	Noise Management Plan The Proponent must prepare a Noise Management Plan for the project to the satisfaction of the Secretary. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	<u>Noise Management Plan Approval</u> The Integra UGNMP (Document No. INTUG-263795162-21, version 3.1, dated 26 July 2019) as initially approved by the Department on 28 March 2017 prior to recommencement of mining by Glencore. Since this time the NMP has been updated and re-approved by the Department on three separate occasions, two of which fall within the audit period. These include: - The Department approved the NMP on 10 September 2018 following its review and update in response to the approval of Modification 8 of PA 08_0101. - The Department approved the NMP on 26 July 2019 following a review and updated of the plan to include attended noise monitoring for construction activities and cumulative noise management. <u>Noise Management Plan Implementation</u> Noise Management Controls Multiple examples were documented and observed demonstrating implementation of the NMP including: - Annual sound power testing of static sources conducted by Umwelt during the audit period. The auditors note that the requirement for annual sound power testing is not specific to surface equipment only. An opportunity for improvement has been made for this commitment to be made more specific. - A combination of attended, unattended and meteorological monitoring is conducted in accordance with the NMP. Noise trigger exceedance protocols were not triggered during the audit period. - Integra UG maintains regular inter-mine consultation with neighbouring mines. - Glencore have in place a procurement process which requires the review of all new equipment. An 'Introduction to Site' checklist is completed for all new plant and equipment. Within this checklist there is a requirement for noise emissions to be reviewed. - An 'Introduction to Site Checklist – for Light Vehicles' is completed for all light vehicles, which requires a check for reversing alarms to be conducted. This ensures that only broadband reversing alarms are utilised on all vehicles. Attended Noise Monitoring Summary Compliance monitoring of noise criteria is managed through attended noise monitoring. Section 4.2 of the NMP provides an overview of the attended noise monitoring undertaken by Integra. This section outlines that monitoring will be undertaken at representative locations of those detailed in Table 2 of the project approval. This approach has been previously approved by the Department. Figure 2 of the NMP outlines the location of the following attended noise monitoring sites: - Noise assessment group (NAG) 3 - NAG 4 - NAG 5 - NAG 6 - NAG 8 - MAG 9 - NAG 10 The locations for NAG 1 and NAG 7 are not outlined on Figure 2 of the NMP, however these NAGs are monitored as part of the attended noise monitoring conducted by Umwelt during the audit period. Umwelt summarise the location of each attended noise monitoring location in the environmental noise monitoring reports. There is therefore a slight inconsistency between the monitoring locations specified in the NMP and those included in the attended noise monitoring. However, as there appear to be more monitoring locations than those outlined in the NMP, this does not constitute a non-compliance.	Compliant	IEA OFI 01 – It is suggested that Section 3.2.1 of the NMP be amended so that the commitment for sound power testing is applicable to surface equipment and infrastructure only. IEA OFI 02 – Ensure the attended noise monitoring locations outlined in the NMP are reflective of the locations being monitored and reported in the quarterly environmental noise monitoring reports. Appendix A, Figure 2.1 of the environmental noise monitoring reports should be consistent with Figure 2 of the NMP. IEA OFI 03 – it is suggested the annual review outline that the Department has approved Integra UG conduct attended monitoring at representative

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Attended noise monitoring was conducted on a quarterly basis during the audit period by external consultant Umwelt. During construction associated with modification 8 of PA 08_0101, Umwelt increased the monitoring frequency to monthly, as specified in Section 4.2.1 of the NMP. Complaints Management The auditors reviewed the Integra UG Complaints register for the audit period. No complaints were received in relation to noise emissions. Incident Management No incidents were recorded during the audit period in relation to noise. Reporting Integra UG make available the environmental noise monitoring reports on the Integra UG public website. A summary of monitoring conducted during the year is reported in the Annual Reviews. The auditors reviewed the 2018 and 2019 Annual Reviews. It is noted that the noise monitoring summary provided in Section 6.3 of the Integra UG Annual Review does not clearly outline that monitoring is conducted at representative locations only or that this approach had been approved by the Department. Summary Based on the evidence reviewed, the NMP was considered to have been generally implemented at the time of the audit. Evidence: - Letter to the Department from Integra UG seeking approval of the NMP, AQMP and the EMS, dated 28 June 2020 - Letter from the Department approving the NMP, AQMP and the EMS, dated 26 July 2019 - Letter from the Department approving NMP, AQMP and the EMS, dated 10 September 2018 - Sound power Level Testing Report, Integra UG ventilation facility, Umwelt, May 2020 - Sound emissions testing report, Integra UG ventilation fan facility, Umwelt February 2018 - Sound power level testing report, Integra UG ventilation facility, Umwelt February 2019 - Environmental & Community Risk Register, dated 30 June 2020 - Environmental noise monitoring reports, Umwelt 2017-2020 - Integra UG Complaints Register (audit period) - Integra UG Incident Register (audit period) - Introduction to site checklist (793190785-33) - Introduction to site checklist – light vehicles (793190785-463)		
031	SCH3 C9a	This plan must: (a) be prepared in consultation with the EPA, and then submitted to the Secretary for approval;	Evidence of consultation is provided in Appendix A of the NMP. The following is provided: - Letter from the EPA dated 15 November 2016, in response to a request for consultation from Integra. The EPA stated that it had not reviewed the plans submitted for review (including the NMP) and offers no comments in relation to them. - Letter from the EPA dated 22 June 2018, in response to a request for consultation from Integra. The EPA again stated that it had not reviewed the plans submitted for review (including the NMP) and offers no comments in relation to them. While evidence of previous consultation requests being submitted to the EPA was provided to the auditors, no evidence of consultation with the EPA when the NMP was updated in 2019 was provided. This condition is therefore found to be not compliant. Evidence of submission to the Secretary is detailed against schedule 3, condition C9 above.	Not Compliant LOW	IEA REC 01 – It is recommended that Integra UG confirm that a request for consultation was sent to the EPA with regards to the latest update of the NMP. Evidence of consultation should be provided in the NMP, as has been Integra UG's practice in the past.

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Evidence: - Letter to the Department from Integra UG seeking approval of the NMP, AQMP and the EMS, dated 28 June 20 - Letter from the Department approving the NMP, AQMP and the EMS, dated 26 July 2019 - Letter from the Department approving NMP, AQMP and the EMS, dated 10 September 2018 - Letter from EPA regarding consultation of the NMP, dated 15 November 2016 - Letter from EPA regarding consultation of the NMP, dated 22 June 2018 - Integra UG Noise Management Plan		
032	SCH3 C9b	This plan must: (b) describe the measures that would be implemented to ensure: - compliance with the noise criteria and operating conditions of this approval; and - best management practice is being employed;	Section 3 of the NMP outlines the measures to be implemented to manage noise emissions at Integra UG and to ensure compliance with the conditions of PA 08_0101. This includes the following: - Operational controls - Cumulative noise management, including the cumulative noise trigger action plan and unattended noise monitoring - Attended noise monitoring - Training and communication - Best practice management Evidence: - Integra UG Noise Management Plan	Compliant	
033	SCH3 C9c	This plan must: (c) describe the noise management system in detail;	Table 1-1 of the NMP maps the project approval condition requirements with the relevant section of the NMP where this requirement is addressed. Table 1-1 states that the noise management system is described in detail in Section 3.3, which is titled 'Corrective Measures'. This section does not outline the Integra UG Noise management system as it only details the response plans to be enacted should an exceedance of attended monitoring occur. Section 4 outlines that Integra UG utilises attended noise monitoring as the primary methodology for determining compliance with noise criteria. Unattended noise monitoring and meteorological monitoring is also utilised and detailed in this section. An opportunity for improvement has been made to improve Table 1-1, however in general the noise management system is described in detail throughout the NMP. Evidence: Integra UG Noise Management Plan	Compliant	IEA OFI 04 – it is suggested that Table 1-1 of the NMP be updated to better reflect where the project approval requirements of the NMP are outlined in the plan.
034	SCH3 C9d	This plan must: (d) include a noise monitoring program that: - 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 this approval; - evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and	Table 1-1 of the NMP maps the project approval condition requirements with the relevant section of the NMP where this requirement is addressed. Table 1-1 states that this condition is referenced in Section 4.4 of the NMP, however this section refers to community complaints and does not describe the noise monitoring program. The Integra UG Noise monitoring program is outlined in Sections 4.1 – 4.3 of the NMP and details the attended, unattended and meteorological monitoring undertaken. A protocol for determining exceedances of project approval criteria is outlined in Section 3.3 of the NMP. Evaluation and reporting of the noise management system is outlined in Section 5 while best practice management is outlined in section 3.5 of the NMP. An opportunity for improvement has been made to improve Table 1-1 however in general the noise monitoring program is described in detail throughout the NMP.	Compliant	Refer IEA OFI 04 against Condition Schedule 3, Condition 9c

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Evidence: Integra UG Noise Management Plan		
035	SCH3 C9e	This plan must: (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 Mount Owen Complex) to minimise the cumulative noise impacts of the mines.	A cumulative noise trigger action plan has been developed in consultation with the owners of nearby mines and is outlined in Section 3.3.3. Evidence: Integra UG Noise Management Plan	Compliant	
AIR QUALITY & GREENHOUSE GAS					
036	SCH3 C10	Odour The Proponent must ensure that no offensive odours are emitted from the site, as defined under the POEO Act.	Odour poses a low risk from an environmental point of view at Integra UG. The only risk of spontaneous combustion for site operations is from the stockpile, which is located within Integra UG's consent boundary but is managed by Rix's Creek (Bloomfield). Spontaneous combustion is managed in accordance with Integra UG's internal Spontaneous Combustion Management Procedure. The auditors conducted a review of complaints and incidents recorded during the audit period and confirmed that no odour related complaints or incidents were recorded during the audit period. The audit site inspection did not identify any offensive odours on site or any potential source of offensive odours. The Integra UG E&C department conduct a surface environmental inspection each month, which covers the entire site. The inspection utilises the 'E&C Monthly Surface Environmental Inspection Checklist', which includes a review of odour on site. Evidence: - Spontaneous Combustion Management Procedure - Monthly Surface Environmental Inspections - Integra UG Complaints Register (audit period) - Integra UG Incident Register (audit period)	Compliant	
037	SCH3 C11	Greenhouse Gas Emissions The Proponent must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Secretary.	Greenhouse gas management is undertaken in accordance with the Air Quality and Greenhouse Gas Management Plan (AQGGMP). Integra UG estimate greenhouse gas emissions using the methods specified in the former Department of the Environment, Water, Heritage and the Arts (DEWHA) (now Department of the Environment and Energy) <i>National Greenhouse and Energy Reporting (Measurement) Determination 2008</i> and the publication, <i>National Greenhouse Accounts Factors July 2018</i>. Greenhouse gas emissions data is reported as required by the National Greenhouse Energy Reporting (NGER) scheme and in Section 6.10 of the mine's Annual Reviews. Glencore utilise SAP ERS, which is a corporate system that requires the E&C department to track environmental and sustainability indicators. Information required to be reported to NGER is entered into this system by the E&C department each month. The auditors sighted evidence of NGER reporting for the 2018-2019 period. The greenhouse gas emissions data presented in Table 38 of the Annual Reviews outlines that total greenhouse gas emissions estimated during 2017, 2018 and 2019 were below those predicted by Jacobs in the Air Quality and Greenhouse Gas Assessment prepared in 2017 as a component of the Mod 8 Environmental Assessment. The auditors identified that Table 38 of the Annual Review presented much higher emissions figures being vented compared to those being flared. Table 38 also shows significant amounts being sent to a third party (power station). For example, in 2019 the Annual Review states that 485,972 t CO₂-e of vented emissions and only 79,739 t CO₂-e of flared emissions were recorded. The 2019 Annual Review also shows 426,643 t CO₂-e being sent to a third party. Integra UG commented that there may be errors reported in the 2017, 2018 and 2019 Annual Reviews and that this will be reviewed and rectified in the 2020 Annual Review.	Compliant	IEA OFI 05 – it is recommended Integra UG review the greenhouse gas data presented in the Annual Reviews to ensure accurate quantities of flared and vented emissions are reported.

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation																				
			Evidence: - Annual Reviews 2018 & 2019 2018-2019 NGER report																						
038	SCH3 C12	Air Quality Criteria The Proponent must ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the project does not exceed or contribute to an exceedance of the criteria listed in Table 9 at any residence on privately-owned land or on more than 25 percent of any privately-owned land. Table 9 <table><tr><th>Pollutant</th><th>Averaging Period</th><th colspan="2">Criterion ^d</th></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>Annual</td><td colspan="2">^a 30 µg/m³</td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>24 hour</td><td colspan="2">^b 50 µg/m³</td></tr><tr><td>Total suspended particulates (TSP)</td><td>Annual</td><td colspan="2">^a 90 µg/m³</td></tr><tr><td>^c Deposited dust</td><td>Annual</td><td>^b 2 g/m²/month</td><td>^a 4 g/m²/month</td></tr></table> <i>Notes to Table 9:</i> ^a Cumulative impact (i.e. increase in concentrations due to the project plus background concentrations due to all other sources); ^b Incremental impact (i.e. incremental increase in concentrations due to the project on its own); ^c Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method; and ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity which has been endorsed by the EPA and then agreed to by the Secretary. For the purposes of this condition, ‘reasonable and feasible avoidance and mitigation measures’ includes, but is not limited to, the requirements in conditions 14 and 15 to develop and implement a real-time air quality management system that ensures effective operational response to the risk of exceedance of the criteria.	Pollutant	Averaging Period	Criterion ^d		Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³		Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m ³		Total suspended particulates (TSP)	Annual	^a 90 µg/m ³		^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month	Integra UG manages air quality in accordance with the site’s Air Quality and Greenhouse Gas Management Plan (AQGGMP). Air quality in the vicinity of Integra UG’s operations is managed via a combination of: - Ambient air quality monitoring - Meteorological monitoring - Site management measures. Integra UG’s air quality monitoring network includes: - Three tapered element oscillating microbalances (TEOMs) - Seven depositional dust gauges - One high volume air sampler (HVAS). The auditors reviewed air quality monitoring results recorded during the audit period. The following was identified: Particulate Matter (PM₁₀) Annual Monitoring results recorded an annual average PM₁₀ below the annual average criterion of 30µg/m³ in 2017, 2018 and 2019. Results from 2020 indicate that all levels are below the annual average criterion of 30 µg/m³ as of 30 September 2020. Particulate Matter (PM₁₀) 24 hour 2017 – A total of 39 days occurred where monitoring results were above the PM₁₀ 24-hour criterion. 2018 – A total of 111 days occurred where monitoring results were above the PM₁₀ 24-hour criterion. 2019 – A total of 54 days occurred where monitoring results were above the PM₁₀ 24-hour criterion. 2020 – A total of 25 days occurred as of 30 September 2020 where monitoring results were above the PM₁₀ 24-hour criterion. Integra UG carried out an investigation in each instance, the conclusion of which was that the elevated results were not attributable to Integra UG’s mining operations. Total suspended particulates (TSP) 2017 (Q4) - The annual average TSP recorded during 2017 remained below the annual average criterion of 90 µg/m³, with a result of 88 µg/m³. There were three events during the reporting period where TSP recorded higher than the annual average results. Meteorological data at the time of these events were reporting predominantly from a south-east direction, upwind of Integra UG’s mining operations. Integra UG considers that its operations did not contribute to these higher levels. 2018 - The annual average TSP recorded at the end of the reporting period was above the annual average criterion of 90 µg/m³, with a result of 115 µg/m³. While levels were above the annual average criterion, they were below the prediction of 119 µg/m³ in the 2009 Air Quality Assessment (AQA), which supported the Environmental Assessment for the site. Integra UG proposed to move the TSP monitoring site to a location that is more representative of site contribution. In 2019 Integra UG updated their monitoring network for HVAS TSP which involved the removal of TSP1 as a monitoring point and a change in location for TSP2. Surface disturbance activities during the month were minimal, with the dust TARP activated for all activities. The wind roses for the period show that site surface operations were not upwind of the monitor for the majority of the period.	Compliant	IEA OFI 06: It is recommended that the Annual Reviews more clearly outline where data has been removed from the rolling annual averages presented in the Annual Reviews. This ensures a clear link between the air quality monitoring data and the summaries provided in the Annual Review.
Pollutant	Averaging Period	Criterion ^d																							
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³																							
Particulate matter < 10 µm (PM ₁₀)	24 hour	^b 50 µg/m ³																							
Total suspended particulates (TSP)	Annual	^a 90 µg/m ³																							
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month																						

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			2019 – According to the Q4 2019 Environmental Monitoring Report, the TSP rolling annual average recorded at HVAS TSP2 at the end of the reporting period was above the annual average criterion of 90 µg/m³, with a result of 91.8 µg/m³. The 2019 Annual Review however reports an annual average TSP concentration of 75.7 µg/m³ at HVAS – TSP2 and does not mention the annual exceedance noted in the Q4 2019 Environmental Monitoring Report. The auditors were informed that the rolling annual average was reduced following removal of the data which was recorded on days confirmed to be extraordinary events. This resulted in the rolling annual average to be below the criteria specified in PA 08_0101. 2020 - The 12-month rolling average TSP recorded at the end of the reporting period was below the Annual Average Criterion of 90 µg/m³ with a result of 71.2 µg/m³ for 2020 year to date. Deposited Dust 2017 (Q4) - The annual average depositional dust results were below the 4 g/m²/month criteria at all monitoring locations. 2018 - The annual average depositional dust results were below the 4 g/m²/month criteria at all monitoring locations. 2019 - All depositional dust gauges remained below the annual average criteria of 4 g/m²/month during 2019 with the exception of IDG1 and IDG7. Integra UG notified the Department on 20 January 2020 that monitoring data for 2019 showed an annual average for depositional dust gauges in excess of 4g/m²/month at IDG1 and IDG7. The Department responded on 13 February 2020 stating that they would await the investigation results in the annual review. The 2019 Annual Review provided an outline of the investigation conducted by Jacobs which concluded that Integra UG's estimated contribution demonstrated compliance with the 'incremental impact' criterion of 2g/m²/month (note ^b of Table 9 of PA 08_0101). It was also concluded that the data did not indicate that Integra UG was the cause of exceedances of the total cumulative impact criteria (note ^a of Table 9 of PA 08_0101). The Department reviewed the 2019 Annual Review and did not make comment on the investigation results. 2020 - The annual average depositional dust results are currently tracking above the 4 g/m² /month criteria for the annual rolling average for IDG1. Extraordinary Events Glencore Corporate sent an email to the Department on 22 January 2020 requesting confirmation of extraordinary event dates during 2019 due to regional dust events, drought and the 2019 bushfires. Glencore recommended 54 dates which related to extraordinary events. The Department responded on 21 January 2020 and provided confirmation that 66 days of 2019 (including the 54 dates recommended by Glencore) were classified as extraordinary events. These dates were therefore removed from Integra UG's reporting summary in accordance with note ^d of Table 9 from PA 08_0101. Once the data was removed from Integra's annual data set this resulted in the rolling annual averages to be below the criteria specified in Table 9 of PA 08_0101. It is recommended that this is outlined more clearly in the Annual Reviews going forward. Conclusion Audit evidence was reviewed by the auditors, including monitoring data, complaints received, and incidents recorded, did not indicate that Integra UG's operations contributed to exceedances of the criteria listed in Table 9 of PA_0101 or on more than 25% of any privately-owned land. Evidence: - Letter to the Department from Integra, dated 20 January 2020, titled 'DD notification for Integra' - Email trail between Glencore and the Department regarding extraordinary dust events - Email from the Department to Integra UG, dated 13 February 2020 regarding depositional dust exceedances - Annual Reviews 2018 & 2019 - Environmental Monitoring reports (Oct 2017 – Sep 2020)		

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
039	SCH3 C13	Mine-owned Land The Proponent must ensure that particulate matter emissions generated by the project do not exceed the criteria in Table 9 at any occupied residence on any mine-owned land (including land owned by adjacent mines), unless: (a) the tenant and/or landowner has been notified of any health risks in accordance with the notification requirements under Schedule 4 of this approval; (b) the tenant on land owned by the Proponent can terminate the tenancy agreement without penalty, subject to giving reasonable notice, and the Proponent uses its best endeavours to provide assistance with relocation and sourcing of alternative accommodation; (c) air mitigation measures (such as air filters, a first flush roof water drainage system and/or air conditioning) are installed at the residence, if requested by the tenant and landowner (where owned by another mine other than the Proponent); (d) particulate matter air quality monitoring is undertaken to inform the tenant and landowner (where owned by a mine other than the Proponent) of potential health risks; and (e) monitoring data is presented to the tenant in an appropriate format, for a medical practitioner to assist the tenant in making an informed decision on the health risks associated with occupying the property, to the satisfaction of the Secretary.	As per the evidence detailed against schedule 3, condition 12 no exceedances of air quality criteria were determined to be the result of Integra UG's operations.	Compliant	
040	SCH3 C14(a)	Operating Conditions The Proponent must: (a) implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site odour, fume and dust emissions generated by the project, including those generated by spontaneous combustion;	Air quality monitoring is undertaken in accordance with the Air Quality and Greenhouse Gas Management Plan (AQGGMP). The auditors identified the following measures in place to minimise off-site odour, fume and dust emissions. Odour and Spontaneous Combustion Refer to audit findings against schedule 3 condition 10. No complaints have been received during the audit period in relation to odour or spontaneous combustion and no odour or spontaneous combustion-related incidents were recorded. Fume This is not applicable as Integra UG do not conduct blasting on site. Dust Key dust generating activities at Integra UG include: - Haulage of coal from the ROM coal stockpile to the project boundary. - Windblown dust from the pit top and ventilation infrastructure areas. - Construction activities - Exploration activities - Gas drainage works - Ventilation works - Subsidence remediation works. Management and contingency measures are triggered by visual monitoring and alerts from the real time operational monitoring and forecast systems as outlined in the Dust Management TARP. The Dust Management TARP contains a number of triggers including monitoring triggers, operational triggers and weather condition alarms. It is noted that the AQGGMP does not refer to the dust management TARP. Other dust management measures in place at the time of the audit included:	Compliant	IEA OFI 07 – It is suggested that the AQGGMP makes reference to the internal dust TARP.

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- Progressive rehabilitation sighted during the site inspection. - Water carts – Integra UG have a contract with A Plus to conduct dust suppression onsite. Water is sprayed on the pit top area and a second cart is used for dust suppression during construction / rehabilitation activities away from the pit top. - Water sprays – these are installed at the pit top (along the access road and conveyor belt) and are automated and managed by the Surface Mechanical Coordinator. - Internal TEOM monitoring network - should a TEOM record a dust exceedance, an automatic alert is sent to the Integra UGE&C department and relevant personnel (via Sentinex). An investigation is then conducted, which involves a review of Met data, operations occurring on site and air quality monitor readings at other, nearby monitors. An internal dust investigation report is completed and kept on file. If the investigation determines that Integra UG are the source of the exceedance, then this would be reported as an exceedance of air quality criteria in Table 9 of PA 08_0101. This had not occurred during the audit period. - Integra UG's E&C department review meteorological conditions every morning and issue correspondence to alert personnel to the higher risk to air quality impacts. - Monthly and weekly environmental inspections are conducted by the E&C department. The management measures detailed above are outlined in the AQGGMP, with the exception of internal compliance monitoring measures such as the dust TARP. A review of monitoring results, complaints received, and incidents recorded as well as site inspection findings indicates that best practice air quality management was being implemented on site during the audit period. Evidence: - Air Quality TARP (793190785-1484) - Email from the E&C Coordinator to the E&C department, dated 13 November 2019 - Dust Exceedance Report – Internal, dated 29 November 2020 - Site Inspection - E&C department monthly environmental inspections - E&C department weekly surface inspections		
041	SCH3 C14(b)	Operating Conditions The Proponent must: (b) minimise any visible air pollution generated by the project;	The controls in place (as detailed above against Schedule 3 Condition 14(a)) were considered to be adequate for minimising visible air pollution. Evidence: Refer Schedule 3 Condition 14(a)	Compliant	
042	SCH3 C14(c)	Operating Conditions The Proponent must: (c) operate an air quality management system on site to ensure compliance with the relevant conditions of this approval;	Integra UG's air quality management system is outlined in the AQGGMP. Air quality monitoring at Integra UG includes: - three tapered element oscillating microbalances (TEOMs), - seven depositional dust gauges (DDGs); and - one high volume air sampler (HVAS). Refer to evidence against Schedule 3, Condition 12. Evidence: - Schedule 3, Condition 12.	Compliant	
043	SCH3 C14(d)	Operating Conditions The Proponent must:	Daily weather reports are provided to relevant mine personnel to allow a review of conditions each morning prior to shift change. This allows operational personnel to be alerted to any non-favourable meteorological conditions predicted for the day.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		(d) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d in condition 12);	The auditors sighted evidence of daily weather reports being reviewed by the E&C department. During the audit period a number of extraordinary events were classified by the Department, including regional dust events and regional bushfire events. This is discussed against schedule 3, condition 12. Evidence: - Schedule 3, Condition 12. - Daily weather forecast report, dated 02 December 2020 - Site Inspection		
044	SCH3 C14(e)	Operating Conditions The Proponent must: (e) minimise surface disturbance of the site; and	All surface disturbance activities at Integra UG are undertaken in accordance with the GCAA Ground Disturbance Permit (GDP) Procedure (CAA HSEC PRO 0002). This procedure requires a GDP form (GCAA HSEC PER 0004) to be completed and authorised by the E&C department prior to any surface disturbance work occurring. A sample of GDPs were reviewed by the auditors for surface disturbance work conducted during the audit period. At the time of the audit site inspection the auditors sighted water carts and automatic water sprayers in use across the operational surface areas. In addition, progressive rehabilitation was sighted at recently disturbed areas such as the ventilation fan site 3. Conclusion On the basis that the GDP process was generally being implemented across the site during the audit period, and from the evidence gathered during the audit site inspection, the auditors conclude that Integra UG were minimising surface disturbance across the site. Evidence: - Ground Disturbance Permit, CAA HSEC PER 004, permit ID GD-17-12-18-09-06 dated 18 December 2017 - Site Inspection	Compliant	
045	SCH3 C14(f)	Operating Conditions The Proponent must: (f) co-ordinate the air quality management on site with the air quality management of nearby mines (including Ashton, Rix's Creek North, Rix's Creek and the Mount Owen Complex) to minimise cumulative air quality impacts,	Section 3.1.1 of the AQGGMP outlines the cumulative air quality management practices in place between Integra UG and nearby mines including MOC, Ashton, Rix's Creek and Glendell mines. A quarterly inter-mine meeting is held with E&C representatives from each of the nearby mines. The auditors reviewed meeting minutes from the Inter-mine meetings conducted between Integra, MOC, Ashton, Rix's Creek and Wambo mines. Item 1 on the agenda requires cumulative impacts to be discussed in relation to air quality, noise, blasting, bushfire management and community. No matters were required to be raised by Integra UG with regards to air quality. Integra UG also has additional coordinated controls in place with MOC and Glendell. Integra UG operates a combined community consultative committee (CCC) with MOC and utilises the MOC real time monitoring network for air quality and noise. Integra UG also utilises the Glendell meteorological monitoring station. Integra UG's air quality exceedance investigation process involves a review of Integra UG's contribution to cumulative air quality impacts in the area. The auditors reviewed this process in detail. Monitoring results and investigation findings, conducted by Integra UG and external consultants, indicate that Integra UG's contribution to cumulative dust monitoring results is minimal. Evidence: - Inter-Mine Meeting minutes, dated 28 September 2020 - Air Quality Exceedance Investigation, Jacobs 2020 - Annual Reviews 2018 & 2019	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- Air Quality monitoring data – EMD sighted (audit period) - Environmental Monitoring Reports (2017 – 2020)		
046	SCH3 C14	Operating Conditions The Proponent must implement the operating conditions to the satisfaction of the Secretary.	The above measures are described in the AQGGMP which was approved by the Secretary (refer Schedule 3, Condition 15 below). Reporting of air quality performance is included in the Annual Review which is provided to the Department.	Compliant	
047	SCH3 C15	Air Quality & Greenhouse Gas Management Plan The Proponent must prepare an Air Quality & Greenhouse Gas Management Plan for the project to the satisfaction of the Secretary. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	AQGGMP Approval The Integra UGAQGGMP (Document No. INTUG-793190785-48, version 3.1, dated 26 July 2019) was initially approved by the Department on 28 March 2017 prior to recommencement of mining by Glencore. Since this time, the AQGGMP has been updated and re-approved by the Department on three separate occasions, two of which fall within the audit period. These include: - The Department approved the AQGGMP on 10 September 2018 following its review and update in response to the approval of Modification 8 of PA 08_0101. - The Department approved the AQGGMP on 26 July 2019 following its review and update to include a cumulative response protocol and update of location of TSP2. AQGGMP Implementation Air quality Controls Table 2-4 of the AQGGMP outlines the objectives and performance indicators for air quality at the site. A review was conducted against each of these performance indicators and targets to assist with the implementation review of the AQGGMP. - No offensive odour emitted from site - no complaints were received during the audit period in relation to odour, indicating compliance with this performance target. - Particulate matter emissions do not cause an exceedance of air quality assessment criteria outlined in PA 08_0101 - as per evidence detailed against schedule 3, condition 12, audit evidence reviewed including monitoring data, complaints received and incidents recorded indicate that Integra UG's operations did not contribute to exceedances of the criteria listed in Table 9 of PA_0101 or on more than 25% of any privately-owned land. - Minimise air quality complaints from the community - no complaints were received during the audit period in relation to air quality, indicating compliance with this performance target. - Comparison of measured air quality with environmental assessment: The results of air quality monitoring data do not indicate air quality impacts are greater than EA predictions. This is also reported in the Integra UG Annual Reviews 2017, 2018 and 2019. - Strategies within the AQGGMP are comparable to established best practice: Dust management measures in place during the audit period were generally in accordance with industry standards and best practice measures and were reflective of the air quality impacts generated by the mine. - Minimise release of greenhouse gas emissions: Integra UG maintain annual greenhouse gas emission, energy and fuel consumption targets which must be reported on each year. Greenhouse emissions are tracked and reported in the Annual Reviews and NGERs reporting as detailed against schedule 2 condition 11. In addition, a number of goaf gas drainage boreholes are connected to the EDL Power Station, which utilises the methane gas from the mine to generate electricity for distribution to the NSW power grid. Air quality management measures are outlined in Section 3.1 of the AQGGMP. Controls verified to be in place at the time of the audit site inspection include: - Coal handling areas, roads and trafficked areas were maintained in a moist condition using a combination of mobile water carts and automated water sprays. It is noted that no chemical stabilisers are used at Integra UG for dust suppression despite being stated in the AQGGMP. A mobile water cart is also in place for use during construction or surface disturbance works. Integra UG engage external contractor 'A Plus' to conduct water cart services. - Restricted vehicle speeds were sighted by the auditors.	Not Compliant LOW	Recommendation not required as Integra UG have consulted with Carbon Based to ensure prevent a reoccurrence of this non-compliance in future.

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- Water sprays were sighted on conveyors in the portal area. In addition, conveyors are generally covered, and minimal dust was observed being generated from the coal being discharged from the conveyor onto the ROM stockpile. - The auditors sighted evidence of obsolete roads being rehabilitated. - An air quality monitoring network is in place, refer below for summary of implementation of the monitoring network. - Cumulative air quality management practices are in place between Integra UG and neighbouring mines, as detailed against schedule 33 condition 14(f). Air quality monitoring summary Air quality monitoring at Integra UG includes the following: - Three Tapered Element Oscillating Microbalance (TEOM) continuous air quality monitors that measure the concentration of particulate matter less than ten microns in diameter (PM10); - Seven Depositional Dust Gauges used for monitoring of larger dust particles (typically >50µm); and - One High Volume Air Sampler (HVAS) that monitors Total Suspended Particulates (TSP) over a 24 hour period every sixth day. A summary of monitoring conducted during the audit period is provided against Schedule 3 Condition 12. In summary the following exceedances were identified: PM₁₀ 24hr: Exceedances of PM₁₀ 24hr criteria were identified during the audit period (approx. 229 days where exceedances were recorded) which required investigations to be carried out. In all instances Integra UG summarised from investigations that the elevated results were not attributed to Integra UG operations. TSP: Exceedances of the annual average TSP concentrations were recorded which required investigations to be carried out. Investigations concluded that Integra UG's operations did not contribute to these higher levels. Integra UG updated their monitoring network for HVAS TSP in 2019 which involved the removal of TSP1 as a monitoring point and a change in location for TSP2. Deposited Dust: An exceedance of deposited dust above the annual average criteria of 4 g/m2 /month during 2019 was recorded. Investigations conducted by Integra UG and external consultants Jacobs concluded that the data did not indicate that Integra UG was the cause of exceedances of the total cumulative impact criteria. Complaints management The auditors reviewed the Integra UG Complaints register for the audit period. No complaints were received in relation to air quality. Incident Management A review of incidents recorded in Integra UG's internal database CMO during the audit period was conducted by the auditors. The following was identified: - CMO Incident Ref 2020012241.0, dated 16 January 2020: Environmental air quality annual averages above limits. Integra UG reported the recorded annual average exceedances noted above as an internal incident which required investigation. Jacobs was engaged to conduct investigations into the exceedances and as noted the data did not indicate that Integra UG was the cause of exceedances of the total cumulative impact criteria. - CMO Incident Ref 20171215303.2, dated 15 December 2017: a calculation error was identified with regards to Sentinex unit S10-D2 (TEOM 2) which resulted in the monitoring equipment reporting an incorrect 24-hr average. The incident was an internal incident only and did not require reporting to regulatory authorities. - CMO Incident Ref 2020011614.1, dated 16 January 2020: This incident was in relation to Carbon Based failing to pick up the deposited dust samples in December within the required 30days +/- 2days. The AQGGMP requires sampling of Deposited Dust to be in accordance with AS/NZS 3580.10.1:2016 Methods for Sampling and Analysis of Ambient Air, Determination of Particulates—Deposited Matter—Gravimetric method. As monitoring of deposited dust was one		

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			day outside of the limits specified in AS/NZS 3580.10.1:2016 and this is the selected methodology specified in the AQGGMP this is found to be a non-compliance with regards to the implementation of the AQGGMP. No recommendation is required to be applied. Reporting Integra UG make available the environmental air quality monitoring data summary on the Integra UG public website. A summary of monitoring conducted during the year is also reported in the Annual Reviews. Summary Based on the evidence reviewed the AQGGMP was considered to have been adequately implemented at the time of the audit with the exception of collection of deposited dust samples not occurring in accordance with AS/NZS 3580.10.1:2016, as stipulated in Table 4-1 of the AQGGMP. Evidence: • AQGGMP • Site Inspection • Environmental Monitoring Reports (audit period) • Incident register (audit period) • Complaints Register (audit period) • Annual Reviews 2017, 2018 and 2019		
048	SCH3 C15a	(a) be prepared in consultation with EPA, and then submitted to the Secretary for approval;	Evidence of consultation is provided in Appendix A of the AQGGMP. The following is provided: • Letter from the EPA dated 15 November 2016, in response to a request for consultation from Integra. The EPA stated that it had not reviewed the plans submitted for review (including the AQGGMP) and offers no comments in relation to them. • Letter from the EPA dated 22 June 2018, in response to a request for consultation from Integra. The EPA stated that it had not reviewed the plans submitted for review (including the AQGGMP) and offers no comments in relation to them. While evidence of previous consultation requests being submitted to the EPA was provided to the auditors no evidence of consultation occurring with the EPA when the AQGGMP was updated in 2019 was provided. As such this condition is found to be not compliant. Evidence of submission to the Secretary is detailed against schedule 3, condition C9 above. Evidence: • Letter to the Department from Integra UG seeking approval of the NMP, AQGGMP and the EMS, dated 28 June 2020 • Letter from the Department approving the NMP, AQGGMP and the EMS, dated 26 July 2019 • Letter from the Department approving NMP, AQGGMP and the EMS, dated 10 September 2018 • Letter from EPA regarding consultation of the AQGGMP, dated 15 November 2016 • Letter from EPA regarding consultation of the AQGGMP, dated 22 June 2018	Not Compliant LOW	IEA REC 02 – It is recommended that Integra UG confirm that a request for consultation was sent to the EPA with regards to the latest update of the AQGGMP. Evidence of consultation should be provided in the AQGGMP, as has been Integra UG's practice in the past.
049	SCH3 C15b	(b) describe the measures that would be implemented to ensure: • compliance with the air quality criteria and operating conditions of this approval; and • best practice air quality management is being employed;	Air quality management measures are outlined in Section 3.1 of the AQGGMP.	Compliant	
050	SCH3 C15c	(c) describe the air quality management system in detail;	The air quality management system is described in Section 3.1 of the AQGGMP.	Compliant	
051	SCH3 C15d	(d) include an air quality monitoring program that:	The air quality monitoring program is outlined in Section 4 of the AQGGMP.	Compliant	IEA OFI 08 – it is suggested that Table

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		• uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the project; • includes a protocol for determining any exceedances of the relevant conditions of this approval; • adequately supports the proactive and reactive air quality management system; • includes PM2.5 monitoring (although this obligation could be satisfied by the regional air quality monitoring network if sufficient justification is provided); • evaluates and reports on the effectiveness of the air quality management system and the best practice air quality management measures; and	An Exceedance Reporting Protocol is outlined in Section 5.1.2, it is noted that this is not referenced in Table 1-1 of the AQGGMP which maps project approval conditions to relevant sections of the plan. In addition, Section 4 does not outline how Integra UG will evaluate and report on the effectiveness of the air quality management system and the best practice air quality management measures. This is outlined in Section 5 review and improvement.		1-1 of the AQGGMP be updated to better reflect where the project approval requirements of the AQGGMP are outlined in the plan.
052	SCH3 C15e	(e) include 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 Mount Owen Complex) to minimise the cumulative air quality impacts of the mines.	Section 1.4 of the AQGGMP summarises the consultation conducted with neighbouring mines in relation to the development of the AQGGMP. Section 3.1.1 outlines the cumulative air quality management measures in place with neighbouring mines to minimise the air quality impacts of the mines. It is noted that this is not referenced in Table 1-1 of the AQGGMP which maps project approval conditions to relevant sections of the plan.	Compliant	Refer IEA OFI 08 against Schedule 3 Condition 15(d)
METEROLOGICAL MONITORING					
053	SCH3 C16	For the life of the project, the Proponent must ensure that there is a meteorological station in the vicinity of the site that: (a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the NSW Industrial Noise Policy or as otherwise approved by the EPA.	Integra UG utilise the Glendell Meteorological Station in order to ensure compliance with Schedule 3, Condition 16 of PA 08_0101. The weather station records rainfall, relative humidity, wind speed, wind direction and sigma theta at 10 minute intervals and temperature at two minute intervals. The data is transferred by a telemetry link to the weather display and is used to evaluate weather conditions. The weather station operates a Sentinex system which is maintained by external consultants Novecom. The auditors sighted the Sentinex weather station calibration report, dated 07 May 2020, for 12 month maintenance and calibration of the met station. The weather station is operated and maintained in accordance with the following, as referenced in the calibration and maintenance annual report: • AS 3580.14-2011: Methods for sampling and analysis of ambient air - Meteorological monitoring for ambient air quality monitoring applications • DR_AS_3580.14.doc: DRAFT Methods for sampling and analysis of ambient air Part 14: Meteorological monitoring for ambient air quality monitoring applications • Procedure N002 - Maintenance and calibration of meteorological equipment • Manufacturer's Handbook(s) Meteorological data is reported in the Integra UG quarterly environmental monitoring reports and summarised in the Annual Reviews. The auditors are satisfied the meteorological station is being operated in accordance with the Approved Methods for Sampling of Air Pollutants in New South Wales guideline. A review of the annual maintenance and calibration report indicates that temperature lapse rate is being monitored at a height of 2m and 10m. Integra UG informed the auditors that the meteorological station does not have temperature sensors to measure the lapse rate up to 60m as is required by the NSW Industrial Noise Policy (Table C4). Instead, the weather station calculates Sigma Theta and the subsequent atmospheric stability classes (stab cat). Evidence of compliance with Sch3C16b) was provided by Novecom in an email stating that Sigma Theta and the stab cat were calculated in accordance with the NSW Industrial Noise Policy, and also in line with the new Noise Policy for Industry. Further EPA approval is therefore not required. Evidence: • Email from Novecom, dated 16 February 2018 • Sentinex Weather Station Calibration Report, dated 07 May 2020	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation																								
			- Discussion with Integra UG E&C Coordinator - AQGGMP - NSW Industrial Noise Policy (2000) https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/noise/2000001-nsw-industrial-noise-policy.pdf																										
SUBSIDENCE																													
054	SCH3 C17	Performance Measures The Proponent must ensure that the project does not cause any exceedance of the performance measures in Table 10. Table 10 <table><tr><th colspan="2"><i>Water</i></th></tr><tr><td>Glennies Creek alluvial aquifer</td><td>Negligible impact</td></tr><tr><td>Natural watercourses on site</td><td>No greater environmental consequences than predicted in the Underground Project EA</td></tr><tr><td>Mt Owen Bettys Creek Diversions</td><td>No greater than the environmental consequences predicted in the Underground Project EA, unless the owner agrees otherwise in writing</td></tr><tr><td>Underground Project Creek Diversions</td><td>Remain hydraulically and geomorphologically stable</td></tr><tr><td>Other water storages and drainage lines</td><td>No greater than the environmental consequences predicted in the Underground Project EA</td></tr><tr><th colspan="2"><i>Biodiversity</i></th></tr><tr><td>Threatened species, populations, habitat or ecological communities</td><td>Negligible impact</td></tr><tr><th colspan="2"><i>Built Features</i></th></tr><tr><td>All built features (except those fully covered by an operative contractual arrangement with another mine owner or other owner of the relevant built feature)</td><td>Safe, serviceable and repairable, unless the owner agrees otherwise in writing, including: - serviceability should be maintained wherever practicable; - loss of serviceability must be fully compensated; and - damage must be fully repaired or replaced, or else compensated </td></tr><tr><th colspan="2"><i>Public Safety</i></th></tr><tr><td>Public Safety</td><td>No additional risk due to mining</td></tr></table> Notes: - The Proponent will be required to define more detailed performance indicators for each of these performance measures in the various management plans that are required under this approval. - Requirements regarding “safe” or “serviceable” do not prevent preventative or mitigatory actions being taken prior to or during mining in order to achieve or maintain these outcomes. - Compensation required under this condition includes any compensation payable under the Mine Subsidence Compensation Act 1961 and/or the Mining Act 1992. - These subsidence impact performance measures should be read in conjunction with the conditions relating to rehabilitation at the end of this Schedule.	<i>Water</i>		Glennies Creek alluvial aquifer	Negligible impact	Natural watercourses on site	No greater environmental consequences than predicted in the Underground Project EA	Mt Owen Bettys Creek Diversions	No greater than the environmental consequences predicted in the Underground Project EA, unless the owner agrees otherwise in writing	Underground Project Creek Diversions	Remain hydraulically and geomorphologically stable	Other water storages and drainage lines	No greater than the environmental consequences predicted in the Underground Project EA	<i>Biodiversity</i>		Threatened species, populations, habitat or ecological communities	Negligible impact	<i>Built Features</i>		All built features (except those fully covered by an operative contractual arrangement with another mine owner or other owner of the relevant built feature)	Safe, serviceable and repairable, unless the owner agrees otherwise in writing, including: - serviceability should be maintained wherever practicable; - loss of serviceability must be fully compensated; and - damage must be fully repaired or replaced, or else compensated	<i>Public Safety</i>		Public Safety	No additional risk due to mining	Mining Progress Summary Longwall 13: Secondary extraction of Longwall 13 commenced on 23 May 2017, prior to the commencement of the audit period. Longwall 13 completed mining on 10 August 2018 Longwall 14: Extraction of Longwall 14 commenced mining on 7 September 2018 and finished production on 17 August 2019. Longwall 15: Longwall 15 commenced production on 19 September 2019. Mining of Longwall 15 was completed on 5 May 2020. At completion of mining the total void length for Longwall 15 was 1834m, with a void width of 257m. Longwall 16: Longwall 16 commenced secondary extraction on 09 June 2020. The auditors were informed that the Longwall 16 extraction face was at chainage 725 m on 30 November 2020. Glennies Creek alluvial aquifer Integra UG maintain a groundwater monitoring program which includes assessment of potential impacts to groundwater dependent ecosystems associated with the Glennies Creek alluvial aquifer. Trigger limits were reached for pH and electrical conductivity at monitoring point GCP9 which includes Glennies and Station Creek Alluviums. External consultants GeoTerra conducted investigations into the groundwater trigger exceedances. In all instances the investigations concluded that these results are not considered to be associated with Integra UG’s operations. The audit did not involve on site monitoring and therefore the audit findings must rely on the technical data collected by Integra UGs external subsidence consultants. The auditors and subsidence specialist did not identify any evidence which invalidated the subsidence monitoring data or investigations conducted. The auditors reviewed the bi-monthly subsidence reports prepared by SCT, a sample of weekly subsidence inspection forms and six monthly subsidence reports prepared by SCT. No evidence was obtained which indicates anything other than negligible impacts to the Glennies Creek alluvial aquifer. Further evidence is provided against Schedule 3 Condition 30. Natural watercourses on site Exceedances in surface water criteria were triggered during the audit period. Integra UG conducted investigation in response to these exceedances. All investigations concluded that the exceedances were not attributed to Integra UG’s operations. As detailed above the auditors reviewed a combination of subsidence monitoring data which validated that Integra UG’s mining operations have not caused impacts to any natural watercourses which exceed predictions made in the project environmental assessments. Further evidence is provided against Schedule 3 Condition 30. Mount Owen Bettys Creek Diversions Bettys creek diversion falls within the subsidence impacts zone for Longwalls 13-16. The results of the annual Bettys Creek diversion channel stability and stream health monitoring indicate that the condition of the diversion has not significantly changed from what was observed during the baseline survey. Further evidence is provided against Schedule 3 Condition 30 and the implementation review conducted against the <i>Bettys Creek Diversion Asset Management Plan</i>. Underground project creek diversions Creek diversions approved under the Project Approval 08_0101 have not been constructed. These diversions are associated with mining of the Hebden or Barret seams. Other water storages and drainage lines	Compliant	
<i>Water</i>																													
Glennies Creek alluvial aquifer	Negligible impact																												
Natural watercourses on site	No greater environmental consequences than predicted in the Underground Project EA																												
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Threatened species, populations, habitat or ecological communities	Negligible impact																												
<i>Built Features</i>																													
All built features (except those fully covered by an operative contractual arrangement with another mine owner or other owner of the relevant built feature)	Safe, serviceable and repairable, unless the owner agrees otherwise in writing, including: - serviceability should be maintained wherever practicable; - loss of serviceability must be fully compensated; and - damage must be fully repaired or replaced, or else compensated																												
<i>Public Safety</i>																													
Public Safety	No additional risk due to mining																												

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			A Built Features Management Plan was developed under the Extraction Plans for Longwalls 13 and 14 (LW 13&14) and for Longwalls 15 and 16 (LW 15&16). The extraction plans include the following in relation to other water storages on site: • Eastern Rail Pit Asset Management Plan • Mount Owen TP2 Asset Management Plan Subsidence monitoring data did not show any impacts in excess of those predicted in the project environmental assessments. Further evidence is provided against Schedule 3 Condition 20 and 30. Biodiversity Ecological monitoring is completed as per the requirements of the Biodiversity Management Plan. No impacts to biodiversity were identified from subsidence monitoring data during the audit period. Further evidence is provided against Schedule 3 Condition 32. Built Features A Built Features Management Plan was developed under the Extraction Plans for LW 13&14 and for LW 15&16. Subsidence monitoring data did not show any impacts in excess of those predicted in the project environmental assessments. An implementation review against the Built Features Management Plan was conducted as part of this IEA. Refer to Schedule 3 Condition 20. Public Safety A Public Safety Management Plan was developed as part of the Extraction Plans for LW 13&14 and LW 15&16. Subsidence monitoring data did not show any impacts in excess of those predicted in the project environmental assessments. An implementation review against the Public Safety Management Plan was conducted as part of this IEA. Refer Schedule 3 Condition 20. Detailed Performance Indicators The auditors note that more detailed subsidence performance indicators have been defined in each of the relevant management plans required under this approval PA 08_0101. Evidence: • Technical committee meeting minutes, dated 03 December 2020 • Bi-monthly Subsidence Reports, SCT (December 2017- September 2020) • Refer to Schedule 3 Condition 20 • Refer to Schedule 3 Condition 29 • Refer to Schedule 3 Condition 30		
055	SCH3 C17A	Additional Offsets If the Proponent exceeds the water or biodiversity performance measures in Table 10 and the Secretary determines that: (a) it is not reasonable or feasible to remediate the subsidence impact or environmental consequence; or (b) remediation measures implemented by the Proponent have failed to satisfactorily remediate the subsidence impact or environmental consequence, then the Proponent must provide a suitable offset to compensate for the subsidence impact or environmental consequence, to the satisfaction of the Secretary.	This has not occurred during the audit period.	Not Triggered	
056	SCH3 C17B	Additional Offsets The offset must give priority to like-for-like land-based environmental offsets, but may also consider payment into any NSW Offset Fund established by OEH, or funding or implementation of supplementary measures such as: (a) actions outlined in threatened species recovery programs; (b) actions that contribute to threat abatement programs;	This has not occurred during the audit period.	Not Triggered	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		(c) biodiversity research and survey programs; and/or (d) rehabilitating degraded habitat. <i>Note: Any offset required under this condition must be proportionate with the significance of the impact or environmental consequence.</i>			
057	SCH3 C18	Additional Offsets Any dispute between the Proponent and the owner of any built feature over the interpretation, application or implementation of the performance measures in Table 10 is to be settled by the Secretary, following consultation with the SANSW and DRG. Any decision by the Secretary shall be final and not subject to further dispute resolution under this approval.	This has not occurred during the audit period. No disputes have occurred during the audit period. It is noted that the primary owner of surrounding land is Glencore.	Not Triggered	
058	SCH3 C19	First Workings The Proponent may carry out first workings on site, other than in accordance with an approved Extraction Plan, provided that DRG is satisfied that the first workings are designed to remain stable and non-subsiding, except insofar as they may be impacted by approved second workings.	This has not occurred during the audit period.	Not Triggered	
059	SCH3 C20	Extraction Plan The Proponent must prepare an Extraction Plan for all second workings on site. The Proponent must implement the approved plan as approved from time to time by the Secretary.	Integra UG LW13&14 Extraction Plan was conditionally approved by the Department on 06 April 2017 prior to secondary extraction of Longwall 13 commencing on 23 May 2017. The Department formally approved the updated Integra UG LW13&14 Extraction Plan on 11 August 2017. Integra UG LW15&16 Extraction Plan was formally approved by the Department on 16 August 2019 with secondary extraction of Longwall 15 commencing production on 19 September 2019. A detailed review of the implementation of Integra UG's LW15&16 Extraction Plan is included in the findings provided by the Subsidence Specialist. Refer to Appendix D of the 2020 IEA report. The review concluded that the extraction plan was generally being adequately implemented during the audit period. A number of opportunities for improvement were made which have been summarised in the main 2020 IEA report. Evidence: - Letter from the Department 'Extraction Plan Longwalls 13-14 – Approval', dated 11 August 2017 - Letter from the Department 'Extraction Plan – Longwalls 15 and 16', dated 16 August 2019	Compliant	
060	SCH3 C20a	This plan must: (a) be prepared by a team of suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;	Approval for the appointment of experts to prepare Integra UG's LW13&14 Extraction Plan was reviewed and verified as compliant in the 2017 IEA report. Integra UG sent a request to the Department on 15 April 2019 requesting approval of the experts involved in the development of the LW15&16 Extraction Plan. The extraction plan team members are outlined in Table 2-2 of the LW15&16 Extraction Plan. The Department approved the appointment of the suitably qualified experts on 20 April 2019. Evidence: - The Department letter dated 20 April 2019 titled 'Approval of experts – extraction plan for LWs 15&16'. 2017 IEA Report, WSP, dated 19 February 2018	Compliant	
061	SCH3 C20b	This plan must: (b) be approved by the Secretary before the Proponent undertakes any second workings covered by the plan;	Integra UG LW13&14 Extraction Plan was conditionally approved by the Department on 06 April 2017 prior to secondary extraction of Longwall 13 commencing on 23 May 2017. The Department formally approved the updated LW13&14 Extraction Plan on 11 August 2017. Integra UG LW15&16 Extraction Plan was formally approved by the Department on 16 August 2019 with secondary extraction of Longwall 15 commencing production on 19 September 2019.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Evidence: - Letter from the Department 'Extraction Plan Longwalls 13-14 – Approval', dated 11 August 2017 - Letter from the Department 'Extraction Plan – Longwalls 15 and 16', dated 16 August 2019		
062	SCH3 C20c	This plan must: (c) include detailed plans of the proposed second workings and any associated surface development;	Integra UG LW13&14 Extraction Plan was reviewed and verified as compliant in the 2017 IEA report. Graphical plans are provided in Volume 4 of the LW15&16 Extraction Plan. Evidence: 2017 IEA Report, WSP, dated 19/02/2018 - Integra UG LW15&16 Extraction Plan	Compliant	
063	SCH3 C20d	This plan must: (d) include detailed performance indicators for each of the performance measures in Table 10;	Integra UG LW13&14 Extraction Plan was reviewed and verified as compliant in the 2017 IEA report. Performance indicators are detailed in Section 3.6 of the LW15&16 Extraction Plan. The auditors note that more detailed subsidence performance indicators have been defined in each of the relevant management plans required under this approval PA 08_0101. Evidence: 2017 IEA Report, WSP, dated 19 February 2018 - Integra UG LW15&16 Extraction Plan	Compliant	
064	SCH3 C20e	This plan must: (e) provide revised predictions of the conventional and non-conventional subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since this approval, that specifically addresses the incremental and cumulative subsidence effects and impacts of multi-seam mining;	Integra UG LW13&14 Extraction Plan was reviewed and verified as compliant in the 2017 IEA report. Section 5.2 of the LW15&16 Extraction Plan outlines the subsidence predictions of Longwalls 15 and 16 and have been referenced specifically from the Subsidence Assessment prepared by SCT which is included in Volume 3 of the LW15&16 Extraction Plan. Evidence: 2017 IEA Report, WSP, dated 19 February 2018 - Integra UG LW15&16 Extraction Plan	Compliant	
065	SCH3 C20f	This plan must: (f) describe the measures that would be implemented to ensure compliance with the performance measures in Table 10, and remediate any predicted subsidence impacts and/or environmental consequences; including the following, which have been prepared in consultation with DRG: - a coal resource recovery plan that demonstrates effective recovery of the available resource; - a subsidence monitoring program to: - provide data to assist in the management of the risks associated with subsidence; - validate the subsidence predictions; and - analyse the relationship between the subsidence effects and impacts under the Extraction Plan and any ensuing environmental consequences; - a Built Features Management Plan, which has been prepared in consultation with the owners of such features, to manage the potential impacts and consequences of subsidence on any built features; - a Public Safety Management Plan to ensure public safety at the site; and - a revised Rehabilitation Management Plan;	Integra UG LW13&14 Extraction Plan was reviewed and verified as compliant in the 2017 IEA report. The following was identified from review of the LW15&16 Extraction Plan: Coal Resource Recovery Plan A Coal Resource Recovery Plan is available at Volume 1, Appendix B of the LW15&16 Extraction Plan. The plan adequately addresses the requirements of schedule 3, condition 20f of PA 08_0101. Subsidence Monitoring Program A Subsidence Monitoring Program is available at Volume 1, Appendix C of the LW15&16 Extraction Plan. The plan adequately addresses the requirements of schedule 3, condition 20f of PA 08_0101. Built Features Management Plan A Built Features Management Plan is available at Volume 2 of the LW15&16 Extraction Plan. The plan adequately addresses the requirements of schedule 3, condition 20f of PA 08_0101 and includes the following: - Mount Owen Railway and Bettys Creek Bridges Asset Management Plan - Mount Owen Mine Key Features Asset Management Plan - Subsidence Management Protocol. Public Safety Management Plan	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			A Public Safety Management Plan is available at Volume 1, Appendix D of the LW15&16 Extraction Plan. The plan adequately addresses the requirements of schedule 3, condition 20f of PA 08_0101. Revised Rehabilitation Management Plan The site wide rehabilitation management plan is incorporated in the Mining Operations Plan (MOP). The MOP was updated following approval of MOD 8 and to comply with the requirements of schedule 3, condition 20f of PA 08_0101. Evidence: 2017 IEA Report, WSP, dated 19 February 2018 - Integra UG LW15&16 Extraction Plan and sub plans - Integra UG Mining Operations Plan, dated 30 June 2020		
066	SCH3 C20g	This plan must: (g) include a: - Water Management Plan, which has been prepared in consultation with EPA and DoI Water, to manage the potential impacts and consequences of subsidence on surface water and groundwater resources, flooding and existing and proposed creek diversions; and which includes: - surface and groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse impacts on water resources or water quality; - a program to monitor and report groundwater inflows to underground workings; - a program to manage and monitor impacts on groundwater bores on privately-owned land; - Biodiversity Management Plan, which has been prepared in consultation with OEH, to manage the potential impacts and consequences of subsidence on biodiversity and which includes measures to manage potential impacts and/or environmental consequences of the proposed second workings on aquatic and terrestrial flora and fauna; - Land Management Plan, which has been prepared in consultation with relevant landowners, to manage the potential impacts and consequences of subsidence on land in general; - Heritage Management Plan, which has been prepared in consultation with OEH and relevant stakeholders of Aboriginal heritage, to manage the potential impacts and consequences of subsidence on heritage sites or values;	Integra UG LW13&14 Extraction Plan was reviewed and verified as compliant in the 2017 IEA report. The Water Management Plan, Biodiversity Management Plan and Heritage Management Plan are site-wide documents that were updated to address the requirements of Schedule 3, Condition 20g. This has been addressed under the relevant approval conditions for each plan. A Land Management Plan is available at Volume 1, Appendix H of the LW15&16 Extraction Plan. The plan adequately addresses the requirements of schedule 3, condition 20g of PA 08_0101. Evidence: 2017 IEA Report, WSP, dated 19 February 2018 - Integra UG LW15&16 Extraction Plan and sub plans - Refer to findings against Schedule 3, Condition 33 (Heritage Management Plan) - Refer to findings against Schedule 3, Condition 32 (Biodiversity Management Plan) - Refer to findings against Schedule 3, Condition 31 (Water Management Plan)	Compliant	
067	SCH3 C20h	(h) include Trigger Action Response Plans, or equivalent, to address potential subsidence impacts and environmental consequences that may result from mining subsidence.	Integra UG LW13&14 Extraction Plan was reviewed and verified as compliant in the 2017 IEA report. Trigger Action Response Plans (TARPs) are incorporated into each management plan under the LW15&16 Extraction Plan. Evidence: 2017 IEA Report, WSP, dated 19 February 2018 - Integra UG LW15&16 Extraction Plan and sub plans	Compliant	
068	SCH3 C20i	(i) include a contingency plan that expressly provides for adaptive management where monitoring indicates that there has been an exceedance of any performance measures in Table 10, or where any such exceedance appears likely; and	The IUG LW 13-14 Extraction Plan was reviewed and verified as compliant in the 2017 IEA report. Section 6.2 of the IUG LW 15-16 Extraction Plan outlined the mine's contingency response in the event that observed subsidence impacts exceed the performance measures. Evidence: 2017 IEA Report, WSP, dated 19 February 2018	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
069	SCH3 C20j	(j) include a program to collect sufficient baseline data for future Extraction Plans.	- Integra UG LW15&16 Extraction Plan and sub plans Integra UG LW13&14 Extraction Plan was reviewed and verified as compliant in the 2017 IEA report. Collection of baseline data is primarily outlined in the Subsidence Monitoring Program. Evidence: 2017 IEA Report, WSP, dated 19 February 2018 - Integra UG LW15&16 Extraction Plan and sub plans	Compliant	
070	SCH3 C21	Payment of Reasonable Costs The Proponent must pay all reasonable costs incurred by the Department to engage suitably qualified, experienced and independent persons (if required) to review the adequacy of any aspect of the Extraction Plan.	No request has been made by the Department to pay for suitably qualified, experienced and independent persons to review the adequacy of any aspect of the Extraction Plan.	Not Triggered	
SOIL & WATER					
071	SCH3 C22	Water Supply The Proponent must obtain all necessary water licences for the project under the Water Act 1912 or the Water Management Act 2000.	Integra UG maintain the following underground dewatering, surface water extraction and groundwater monitoring licences: - High security water access licences providing access to Glennies Creek - WAL 484 (licence to pump 3 units) - WAL 960 (licence to pump 50 units) - WAL 961 (licence to pump 140 units) - WAL 1172 (licence to pump 3 units) - General security water access licences providing access to Glennies Creek - WAL 1173 (licence to pump 303 units) - WAL 485 (licence to pump 99 units) - Supplementary water access licences providing access to Glennies Creek - WAL 1242 (licence to pump 13 units) - Groundwater licences – dewatering 20BL16986 and 20BL169864 - Combined allocation - Groundwater extraction for dewatering purposes for up to 450 ML per annum 20BL172505 and 20BL172506 - Combined allocation - Groundwater extraction for dewatering purposes for up to 500 ML per annum - Monitoring bore licences: 20BL167917, 20BL169574, 20BL169573, 20BL169571, 20BL171707, 20BL171708, 20BL171710, 20BL171813, 20BL171870, 20BL172277, 20BL172278, 20BL172279 Integra UG integrates water management with neighbouring mines including Mount Owen and Rix's Creek North. Integra UG monitor water management via review of the existing GoldSim model which is reviewed annually by external consultants and presented as the mine's site water balance. A summary of the review is provided in the annual review each year. Water taken during the audit period is summarised below. Volumes are below the allocated thresholds outlined in Integra UG's water licences: - July 2017 - June 2018: 238.1ML taken from Glennies Creek 148ML taken from the Sydney Basin – Hunter Porous Rock Aquifer	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- July 2018 - June 2019: 84.9ML taken from Glennies Creek 93.2ML taken from the Sydney Basin – Hunter Porous Rock Aquifer - July 2019 - June 2020: - Figures were not provided for the July 2019 – June 2020 period.		
072	SCH3 C23	Water Supply The Proponent must ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Secretary.	The site water balance is reviewed quarterly by external consultant Engeny Water Management to calculate water inputs and outputs. Integra UG E&C department maintain a water accounting framework which is updated monthly. Water balance figures are summarised in the Annual Reviews each year and methodologies for water calculations are documented in the site Water Management Plan (WMP). Both the Annual Reviews and the WMP are approved by the Department. Evidence: - Integra UG water accounting framework sighted during audit - Annual Reviews 2017, 2018 & 2019 - WMP - Quarterly review of IUG and Rix's water transfers – Quarter 3 2020, Engeny Water Management, dated 26 November 2020	Compliant	
073	SCH3 C24	Baseline Offsets The Proponent must offset the loss of any baseflow to the surrounding watercourses and/or associated creeks caused by the project to the satisfaction of the Secretary. <i>Notes:</i> - This condition does not apply in the case of losses of baseflow which are negligible. - Offsets should be provided via the retirement of adequate water entitlements to account for the loss attributable to the project. - The Proponent is not required to provide additional baseflow offsets where such offsets have already been provided under previous consents or approvals for the project. These existing offsets are to be described and evaluated in the Surface and Ground Water Response Plan (see below).	This condition was not triggered during the audit period.	Not Triggered	
074	SCH3 C25	Compensatory Water Supply The Proponent must provide compensatory water supply to any landowner of privately-owned land whose water entitlements are impacted (other than an impact that is negligible) as a result of the project, in consultation with DoI Water, and to the satisfaction of the Secretary. The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent, in quality and volume, to the loss attributed to the project, unless otherwise agreed with the landowner. Equivalent water supply must be provided (at least on an interim basis) as soon as practicable after the loss being identified, unless otherwise agreed with the landowner. If the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution. If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent must provide alternative compensation to the satisfaction of the Secretary.	This condition was not triggered during the audit period.	Not Triggered	
075	SCH3 C26	Surface Water Discharges The Proponent must ensure that all surface water discharges from the site comply with the: (a) discharge limits (both volume and quality) set for the project in any EPL; or (b) relevant provisions of the POEO Act or Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.	Integra UG is not authorised to discharge water offsite. EPL 3390 does not permit the discharge of water offsite. This condition is therefore not triggered.	Not Triggered	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
076	SCH3 C27	Creek Diversions The Proponent must carry out the proposed diversions of Bettys Creek and Main Creek in the project area to the satisfaction of the Secretary.	The proposed creek diversions are required should mining of the Hebden seam occur. Mining of the Hebden seam had not occurred and was not planned to occur at the time for the audit. Mining during the audit period has occurred in the Middle Liddell Seam at LW's 13-16 only.	Not Triggered	
077	SCH3 C28	Creek Diversions Within 6 months of completing the construction of the diversions, the Proponent must submit, to the satisfaction of the Secretary and DoI Water, an as-executed report, certified by a practising engineer, confirming that the diversions are hydraulically and geomorphologically stable.	The proposed creek diversions are required should mining of the Hebden seam occur. Mining of the Hebden seam had not occurred and was not planned to occur at the time of the audit. Mining during the audit period has occurred in the Middle Liddell Seam at LW's 13-16 only.	Not Triggered	
078	SCH3 C29	Mt Owen Bettys Creek Diversion The Proponent must: (a) commission a suitably qualified and independent expert, whose appointment has been approved by the Secretary, to carry out a detailed survey of geotechnical, geomorphic and ecological baseline condition of the Mt Owen Bettys Creek Diversions: • prior to carrying out any second workings under the creek diversions; and • within 6 months of completing the second workings under these creek diversions; and (b) provide a copy of these surveys to the Department within a month of the completion of each survey.	Mining during the audit period is summarised below: - LW13: Second Workings mining completed on 10 August 2018 - LW14: Second Workings commenced on 07 September 2018 and completed on 17 August 2019 - LW15: Second Workings commenced on 19 September 2019 and completed on 05 May 2020 - LW16: Second Workings commenced in early June 2020 and underway at the time of the audit. Requirements for this condition include the following: - Survey conducted within 6 months of completing LW13 (by 10 February 2019). Survey was conducted in October 2018, however evidence of this being submitted to the Department within the required timeframe was not provided. - Survey completed prior to commencing LW14 on 07 September 2018. Survey was conducted in May 2018, however evidence of this survey being submitted to the Department within the required timeframe was not provided. - Survey conducted within 6 months of completing LW14 (by 17 February 2020). Survey conducted in June 2020. This survey was provided to the Department on 03 July 2020. On 1 May 2020 Integra UG sought endorsement for SLR to be appointed as experts to conduct the required stream surveys. The Department responded on 20 May 2020 and approved the appointment of the experts. On the basis that the evidence provided did not validate compliance with Schedule 3, Condition 29 this condition is found to be not compliant. Evidence: - Stream Health Assessment Bettys Creek Report, SLR, dated 03 June 2020 - Letter from the Department approving SLR as experts, dated 20 May 2020 - Discussion with E&C Coordinator	Non-Compliant ADMIN NC	IEA REC 03: Integra UG to ensure that survey reports are supplied to the Department in accordance with Schedule 3, Condition 29.
079	SCH3 C30	Water Management Performance Measures The Proponent must comply with the performance measures in Table 11 to the satisfaction of the Secretary. These include:			
080	SCH3 C30	Water Management – General - Maximise water sharing with the other mines in the region (including through the Greater Ravensworth Water Sharing Scheme) - Minimise the use of clean water on site - Minimise the need for supplementary water from external supplies	The water transfer pipeline between Mount Owen and Integra UG was constructed in 2017 and was operational at the time of the audit. A water sharing agreement is in place between Integra UG and Bloomfield which allows water from the Integra UG Portal sump to be transferred to Rix's Creek North mine. Water from Integra UG can also be transferred to MOC via the pipeline under the Greater Ravensworth Area Water Sharing Scheme.	Compliant	
081	SCH3 C30	Glennies Creek and Station Creek alluvial aquifers Negligible environmental consequences to the alluvial aquifer (as shown in Appendix 6) beyond those predicted in the documents referred to in conditions 2 and 3 of Schedule 2, including: - negligible change in groundwater levels; - negligible change in groundwater quality; and	A detailed review of groundwater impacts to alluvial aquifers was conducted based on groundwater monitoring data collected during the audit period. Refer the specialist's findings in Appendix D of the 2020 IEA report. In summary the specialist concluded that impacts recorded were below those predicted in environmental assessments conducted for the mine and outlined in Conditions 2 and 3 of Schedule 2 of PA_0808.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		negligible impact to other groundwater users			
082	SCH3 C30	Construction and operation of infrastructure - Design, install and maintain erosion and sediment controls generally in accordance with the series Managing Urban Stormwater: Soils and Construction including Volume 1, Volume 2A – Installation of Services, Volume 2C – Unsealed Roads, Volume 2D – Main Road Construction and Volume 2E - Mines and Quarries - Design, install and maintain all new infrastructure within 40 m of watercourses generally in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPI 2007), or its latest version - Design, install and maintain creek crossings generally in accordance with the Policy and Guidelines for Fish Friendly Waterway Crossings (NSW Fisheries, 2003) and Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003), or their latest versions	A detailed review of surface water management on site was conducted by the surface water specialist for the audit period. Refer the specialist's findings in Appendix D of the 2020 IEA report. The specialist concluded the following: - Erosion and sediment sighted in use were generally in accordance with the series Managing Urban Stormwater: Soils and Construction including Volume 1, Volume 2A – Installation of Services, Volume 2C – Unsealed Roads, Volume 2D – Main Road Construction and Volume 2E - Mines and Quarries. - A Creek Crossing Management Plan (CCMP) was prepared by SLR in 2018 to cover works associated with the infrastructure corridor in the vicinity of Betty's Creek. - The construction of the electricity transmission lines and distribution lines, as part of modification 8, required crossings of Bettys Creek. It is noted that these powerlines span the creek channel and therefore do not result in disturbance to the stream bed or bank. At the time of this audit, the works associated with the Betty's Creek crossing were complete, and inspection noted that works associated with the creek crossing and adjacent land were stable and showed minimal signs of disturbance or erosion. - No evidence was obtained which indicated creek crossings were not designed, installed or maintained the Policy and Guidelines for Fish Friendly Waterway Crossings (NSW Fisheries, 2003) and Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003).The CCMP states that the location of the crossing has been designed as per the guidelines set out in Fairfull and Witheridge (2003), for example: - The crossing does not occur over a bend in Betty's Creek, - The crossing does not occur over a meandering section of Betty's Creek (which may increase damage to the creek structure, increase erosion or cause misalignment), and - No works are occurring within the creek channel (i.e. from top of bank to top of bank) in order to not affect the creek hydrological flow structure Evidence: - Creek Crossing Management Plan, SLR, dated 5 December 2018 - Site Inspection - GDP, Modification 8 Powerline Construction - Monthly Environmental Inspection Checklists	Compliant	
083	SCH3 C30	Mine sediment dams Design, install and maintain the dams generally in accordance with the series Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries	A sediment dam was installed at the ventilation shaft 3 site. Visual inspection and documentation for this area noted that the sediment dam has been designed and constructed in accordance with the WMP and the consent with regards to the management of surface water. The sediment dam was: - sized using methods outlined in Managing Urban Stormwater: Soils and Construction (Landcom 2004), - designed and installed to include: a 2mm thick HDPE liner; rip rap scour protection of the spillway; and pumping infrastructure for transfer of captured runoff to the mine water system. Evidence: - Integra UG Shaft No. 3 Inspection and Test Plan for dam lining, KCE, dated 11 November 2019 - Site Inspection	Compliant	
084	SCH3 C30	Clean water diversion & storage infrastructure - Design, install and maintain the clean water system to capture and convey the 100 year ARI flood - Maximise as far as reasonable and feasible the diversion of clean water around disturbed areas on site	A detailed review of clean water diversions and storage infrastructure on site was conducted by the surface water specialist for the audit period. Refer the specialist's findings in Appendix D of the 2020 IEA report. In general, the surface water specialist concluded that Clean water within the mine site is diverted away from disturbed land or is directed to flow through clean water diversions wherever practicable.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
085	SCH3 C30	Mine water storages - Design, install and maintain mine water storage infrastructure to ensure no unlicensed or uncontrolled discharge of mine water off-site - Design, install and maintain on-site storages (including mine infrastructure dams, groundwater storage and treatment dams) to ensure they are suitably lined to comply with a permeability standard of $< 1 \times 10^{-9}$ m/s	A detailed review of mine water storages on site was conducted by the surface water specialist for the audit period. Refer the specialist's findings in Appendix D of the 2020 IEA report. The surface water specialist reviewed the recommendations made against this condition in the 2017 IEA and was satisfied that Integra UG had adequately addressed and closed them out.	Compliant	
086	SCH3 C30	Chemical and hydrocarbon storage Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards	Chemical and hydrocarbon storage was sighted during the audit site inspection. Controls sighted included: - Containment measures such as slope, concrete and pallet bunding. - Chemicals sighted in the Portal sump and 'YP' yard were adequately stored in bunded areas. - The workshop area contained an outside storage area for hydrocarbons including oils and greases. The bund was uncovered and had a considerable amount of sludge built up on the floor of the bund. The condition sighted at the time of the audit may impact the storage capacity of the bund. Visible hydrocarbon staining outside of the hardstand bunded area (potentially indicative of issues in handling, spills or overspray) was sighted however no evidence of release off site was sighted which is separated by a small earth bund. Evidence was provided showing J.R Richards conduct servicing and waste removal from the workshop bund and oil separator. . The audit concludes that, while the bund condition was not ideal, the evidence obtained does not validate that the bunded area was not capable of storing the capacity outlined in relevant Australian Standards. Therefore, this condition is found to be compliant with an opportunity for improvement made. Evidence: - Site Inspection - J.R. Richards waste invoice extract - Waste inspection records, dated 24 September 2020	Compliant	IEA OFI 09: Review the operation and capacity of the oil water separator at the workshop to manage rainfall and spill events in accordance with relevant EPA guidelines and standards. Implement any identified actions or controls accordingly. IEA OFI 10: Update the WMP to specifically describe the operation, inspection and management regime of stormwater, chemical containment, and oily water separators.
087	SCH3 C30	Creek Diversions In accordance with conditions 27 and 28 above	This condition was not triggered during the audit period.	Not Triggered	
088	SCH3 C30	Aquatic and riparian ecosystems - Maintain or improve baseline channel stability - Develop site-specific in-stream water quality objectives in accordance with ANZECC 2000 and Using the ANZECC Guidelines and Water Quality Objectives in NSW procedures (DECC 2006), or its latest version	A detailed review of aquatic and riparian ecosystem status was conducted by the surface water specialist for the audit period. Refer the specialist's findings in Appendix D of the 2020 IEA report. In summary: - Baseline stream health and stability monitoring has been undertaken by SLR in 2017. Ongoing monitoring has been conducted at the following times during the audit period: - May 2018 – prior to carrying out second workings for LW 14 which commenced on 07 September 2020 - October 2018 – within 6 months of completing the second workings of LW 13 which were completed on 10 August 2018 - May 2019 – prior to carrying out second workings for LW 15 which commenced on 19 September 2019 - October 2019 – within 6 months of completing the second workings of LW 14 which were completed on 17 August 2019 - June 2020 - 6 months of completing the second workings of LW 15 which were completed on 05 May 2020 The results of the June 2020 Bettys Creek diversion channel stability and stream health monitoring indicates that the majority of monitoring points have experienced no apparent change from what was observed during the October 2019 assessment. The monitoring data summarises that aquatic and riparian ecosystem health is either the same or better than the results outlined in baseline reports.	Compliant	IEA OFI 11: Update the WMP to remove ambiguity in how channel stability and erosion is identified in the WMP (for example, how is rill erosion or channel stability attributed to LW operations or otherwise), include quantifiable triggers (i.e. define 'significant'), and how actions are then communicated and jointly managed between Mt Owen and Integra UG.

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Annual Reviews in 2018 and 2019 note poor condition of the Mt Owen's Middle Bettys Creek diversion, including rill erosion and nearby cracking. Whilst the cracking and erosion issues noted have not been attributable to Integra UG operations, there is opportunity to update the WMP to remove ambiguity in how channel stability and erosion is identified in the WMP (for example, how is rill erosion or channel stability attributed to LW operations or otherwise), include quantifiable triggers (i.e. define 'significant'), and how actions are then communicated and jointly managed between Mt Owen and Integra UG. Evidence: - Site Inspection - Channel stability and stream health monitoring reports, Bettys Creek, SLR (2017, 2018, 2019 & 2020) - Annual Reviews 2017, 2018 and 2019		
089	SCH3 C31	Water Management Plan The Proponent must prepare a Water Management Plan for the project to the satisfaction of the Secretary. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	An approved Water Management Plan was in place prior to the commencement of the audit period. A revised WMP was approved during the audit period, following approval of modification 8 of PA 08_0101 on 10 September 2018 and again on the 24 May 2019 following updates made to the water sharing arrangements between Integra UG and Rix's Creek North. Implementation Review: A detailed review of the WMP's implementation is included in the findings provided by the surface and groundwater specialists. Refer to Appendix D of the 2020 IEA report. The review concluded that the WMP was generally being adequately implemented during the audit period. A number of opportunities for improvement were made which have been summarised in the main 2020 IEA report. Evidence: - Letter from the Department 'Integra UG Approval of Management Plans', dated 10 September 2018 - Letter from the Department 'Integra UG Approval of Management Plans', dated 24 May 2019	Compliant	IEA OFI 12: Update Pollution Incident Response Management Plan to document the handling, storage and incident response for storage of chemicals at Ventilation Shaft 3 (i.e. Solcenic Emulsion).
090	SCH3 C31a	This plan must: (a) be prepared in consultation with OEH, EPA, DRG and Council, and be endorsed by DoI Water and then submitted to the Secretary for approval;	Version 1 of the WMP was prepared in 2016 in consultation with the EPA, Singleton Shire Council (Council), the Department, DRG, DoI Water and OEH prior to submission to the Department in 2017. This was verified in the 2017 IEA. Evidence was provided in Appendix B of the WMP verifying that the EPA was provided a copy of the revised WMP in 2018 for review and feedback. Evidence of Integra requesting consultation with OEH, Council or DRG on 21 June 2018 was provided for review. The auditors were informed that no response to consultation requests made was provided. Evidence: - Letter from EPA 'Integra Draft Management Plans', dated 22 June 2018 - Letter to the Department-RR 'Management Plan Revision', dated 21 June 2018 - Letter to OEH 'Management Plan Revision', dated 21 June 2018 - Letter to Singleton Council 'Management Plan Revision', dated 21 June 2018	Compliant	
091	SCH3 C31b	This plan must: (b) include detailed performance criteria and describe measures to ensure that the Proponent complies with the Water Management Performance Measures (see Table 11);	Water management performance measures and indicators are outlined in section 1.2 of the WMP.	Compliant	
092	SCH3 C31c	This plan must: (c) include a Site Water Balance, which must: include details of:	The site water balance is provided in section 4 of the WMP and satisfies the requirements of this condition.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		– sources and security of water supply, including contingency planning; – water use on site; – water management on site; and – any off-site water transfers, and • describe what measures would be implemented to minimise clean water use on site;			
093	SCH3 C31d	This plan must: (d) include a Creek Diversion Management Plan for the proposed creek diversions in the project area, which must: • be consistent with any related requirements in future Extraction Plan(s); and • include: – a vision statement for the creek relocations; – an assessment of the water quality, ecological, hydrological and geomorphic baseline conditions within each creek; – the detailed design specifications for the creek relocations; – a construction program for the creek relocations, describing how the work would be staged, and integrated with mining operations; – a revegetation program for the relocated creeks using a range of suitable native species; – water quality, ecological, hydrological and geomorphic performance and completion criteria for the creek relocations based on the assessment of baseline conditions; and – a program to monitor and maintain the water quality, ecological, hydrological and geomorphic integrity of the creek diversions;	The Creek Diversion Management Plan was not triggered during the audit period. Development of the Creek Diversion Management Plan is required should mining of the Hebden or Barret seams occur which would trigger the creek diversions permitted under PA 08_0101. This had not occurred during the audit period. A Creek Diversion Management Plan is provided in Section 5 of the WMP which relates to the Mt Owen Bettys Creek Diversion.	Not Triggered	
094	SCH3 C31e	This plan must: (e) include an Erosion and Sediment Control Plan, which must: • identify activities that could cause soil erosion, generate sediment or affect flooding; • describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, and manage flood risk; • describe the location, function and capacity of erosion and sediment control structures and flood management structures; and • describe what measures would be implemented to maintain the structures over time;	An Erosion and Sediment Control Plan (ESCP) is provided in Section 6 of the WMP. The ESCP meets the requirements of Schedule 3 Condition 31e of PA 08_0101.	Compliant	
095	SCH3 C31f	This plan must: (f) include a Surface Water Management Plan, which must include: • detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the project; • a detailed description of the water management system on site; • a description of measures used to manage, monitor and report on the transfer of water under the Greater Ravensworth Water Sharing Scheme; • surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts from the project (for existing creeks and reinstated/rehabilitated creeks); • a program to monitor and assess: – surface water flows and quality; – impacts on water users; – stream health; – channel stability; and – the effectiveness of the water management system;	A Surface Water Management Plan (SWMP) is included in Section 7 of the WMP. The SWMP meets the requirements of Schedule 3 Condition 31f of PA 08_0101.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
096	SCH3 C31g	This plan must: (g) Include a Groundwater Management Plan, which must include: • detailed baseline data of groundwater levels, yield and quality in the region, particularly for privately-owned groundwater bores that could be affected by the project; • groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater water impacts; and • a program to monitor and assess: – groundwater inflows to the mining operations; – impacts on regional aquifers; – impacts on the groundwater supply of potentially affected landowners; – impacts on the Glennies Creek and Station Creek; – impacts on groundwater dependent ecosystems and riparian vegetation; and – the effectiveness of the water management system;	A Groundwater Management Plan (GWMP) is included in Section 8 of the WMP. The GWMP meets the requirements of Schedule 3 Condition 31g of PA 08_0101.	Compliant	
097	SCH3 C31h	This plan must: (h) a Surface and Groundwater Response Plan, which must include: • a response protocol for any exceedances of the surface water and groundwater assessment criteria, including provisions for independent investigation by a suitable qualified hydrogeologist whose appointment has been approved by the Secretary; • measures to offset the loss of any baseflow to watercourses caused by the project; • measures to compensate landowners of privately-owned land whose water supply is adversely affected by the project; and • measures to mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation.	A Surface and Groundwater Response Plan (SGWRP) is included in Section 9 of the WMP. The SGWRP meets the requirements of Schedule 3 Condition 31h of PA 08_0101.	Compliant	
098	SCH3 C31A	Water Pipeline infrastructure Prior to the construction of any bridge crossing for the water pipeline infrastructure, a detailed design of the bridge crossing must be determined following consideration of flood modelling undertaken to the satisfaction of OEH, that assesses the impacts for flood events up to and including the Probable Maximum Flood. The design and modelling must demonstrate to the satisfaction of the Secretary, that the water pipeline infrastructure will not result in any significant flooding impacts on privately-owned land.	The construction of the water transfer pipeline approved under modification 7 of PA_0808, consisted of trenching and under-boring methods. No bridge crossing was required for the water pipeline infrastructure. The auditors sighted the pipeline crossing at the following locations: • Main Creek: trenching was conducted to allow the pipeline to cross Main Creek • Bettys Creek: trenching was conducted to allow the pipeline to cross Bettys Creek • Glennies Creek: the pipeline was under-bored at Glennies Creek to allow crossing. Evidence: • Site Inspection	Not Triggered	
BIODIVERSITY					
099	SCH3 C32	Biodiversity Management Plan The Proponent must prepare a Biodiversity Management Plan for the project to the satisfaction of the Secretary. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	Integra prepared the site-wide Biodiversity Management Plan (BMP) to comply with the requirements of Project Approval 08_0101 Schedule 3, Condition 32. The BMP was updated for MOD 8 and approved by the Department on 10 September 2018. Implementation Review: A detailed review of the BMP's implementation is included in the findings provided by the Biodiversity Specialist. Refer Appendix D of the 2020 IEA report.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			The review concluded that the BMP was generally being adequately implemented during the audit period. A number of opportunities for improvement were made which have been summarised in the main 2020 IEA report. Evidence: - Letter from the Department 'Integra UG Management Plans - Approval', dated 10 September 201 2020 IEA report – Appendix D		
0100	SCH3 C32a	This plan must: (a) be prepared in consultation with OEH and then submitted to the Secretary for approval;	On 21 June 2018 Integra UG provided OEH with copies of the revised BMP, WMP, ACHMP and HHMP. No response was received from OEH with regards to the revised BMP. The BMP was originally approved by the Department on 06 April 2017. Integra submitted the revised BMP, with updates relating to modification 8, to the Department on 07 September 2018. The Department approved the latest revision of the BMP on 10 September 2018. Evidence: - Letter from Integra UG to OEH providing revised management plans and requesting consultation, dated 21/06/2018 - Letter from the Department 'Integra UG – Management Plans', dated 06 April 2017 - Letter from the Department 'Integra UG Environmental management Plans', dated 10 September 2018	Compliant	
0101	SCH3 C32b	This plan must: (b) include: - a description of the short, medium, and long term measures that would be implemented to manage the remnant vegetation and habitat on site; - a detailed description of the measures and procedures to be implemented for: - protecting vegetation and soil outside the areas that are to be impacted; - rehabilitating creeks and drainage lines on the site (both inside and outside the disturbance areas), to minimise net loss of stream length and aquatic habitat; - managing salinity; - managing impacts on fauna; - landscaping the site and along public roads to minimise visual and lighting impacts; - controlling weeds and feral pests, including terrestrial and aquatic species; - controlling access; and - bushfire management; - a detailed description of the measures and procedures to be implemented to: - minimise, to the greatest extent practicable, the disturbance of threatened species and EECs (including undertaking pre-clearance surveys), and rehabilitate any areas of disturbed land associated with the construction of the water pipeline infrastructure; - provide for the salvage, transplanting and/or propagation of any threatened flora (including, but not limited to, threatened orchid species) found during pre-clearance surveys, in accordance with the Guidelines for the Translocation of Threatened Plants in Australia (Vallee et al., 2004); and - satisfy the requirements of conditions 32A to 32C of Schedule 3; - a program to monitor the effectiveness of these measures, and progress against the performance and completion criteria; and	The BMP includes the following: - Section 3.1 includes a description of the short, medium and long term measures which will be undertaken to implement the BMP. - Section 3.2 outlines the management strategies that will be implemented and the performance criteria that will be used to measure the effectiveness of these strategies. This section includes management strategies for vegetation, fauna habitat, soils and salinity, bushfire, landscaping, fauna, exotic and invasive species, agriculture, Bettys Creek, minor surface disturbance areas and subsidence. - Sections 3.1 and 3.2 outline measures requiring implementation which will minimise disturbance to threatened species, EECs and rehabilitated areas. Section 3.2 references the requirement to salvage any threatened flora found during pre-clearance surveys and also includes reference to management measures in place to comply with schedule 3, conditions 32A and 32C - Section 4 outlines the monitoring program to be implemented to measure the effectiveness of biodiversity management and subsidence impacts to biodiversity. - Section 6 outlines the general roles and responsibilities of staff at Integra UG in respect of the BMP.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		details of who would be responsible for monitoring, reviewing, and implementing the plan.			
0102	SCH3 C32A	Water Pipeline Infrastructure The Proponent must plant and maintain, until established, 10 like-for-like trees for every established tree removed during construction of the water pipeline infrastructure and Modification 8 that is associated with the following flora communities: - Central Hunter Ironbark — Spotted Gum — Grey Box Forest EEC; - Central Hunter Swamp Oak Forest; - Hunter Valley River Oak Forest; and - Central Hunter Bulloak Forest. <i>Note: An established tree is considered to be two metres or greater in height.</i>	Modification 7 Modification 7 approved the construction of a water pipeline from Integra UG to the MOC. In 2017 six established <i>Casuarina glauca</i> trees were identified for removal in the Bettys Creek, creek bed area. Integra UG engaged Umwelt to conduct pre-clearance surveys of the area in order to identify habitat trees. Four habitat trees were identified outside of the proposed pipeline track. These trees were not impacted by construction of the pipeline. In accordance with schedule 3 condition 32A of PA 08_0101 10 like-for-like trees must be planted and maintained for every established tree removed during construction of the water pipeline infrastructure. Integra engaged Enright Land Management to obtain and plant 100 <i>Casuarina glauca</i> seedlings in January 2018, more than the number of trees required to allow for potential failure of planted trees. However, inspections of the plantings conducted, by the Integra E&C Department and by Enright Land Management during annual rehabilitation monitoring, identified that of the originally planted 100 trees, approx. 75% had failed and, as a result, additional planting was conducted by Enright in October 2020. Planting failure has been attributed to the dry climatic conditions experienced following the initial planting. Tube stock planted in 2020 as well as the surviving approx. 25 originally planted trees were sighted during the site inspection. Modification 8 Modification 8 approved the extension of longwall mining up to Longwall 20 and required additional ancillary surface infrastructure to be constructed including 3.6km of 11kV powerline. External contractor ARA were contracted to conduct land clearing for construction works associated with modification 8. ARA identified that 1,360 established <i>Casuarina glauca</i> trees were required to be removed. Removal of the trees was conducted in October 2019, in accordance with Integra UG's GPD process and included the conduct of pre-clearance surveys to confirm the location of any habitat trees which required avoidance during land clearing works. At the conclusion of the 2020 audit period all tree clearing and construction associated with Modification 8 was completed. Integra was in the process of engaging an external consultant to conduct the tree planting works. 13,800 <i>Casuarina glauca</i> seedlings are scheduled to be planted within the next six months, pending suitable climatic conditions. Evidence: - MOD 7 GDP, GD-17-12-18-09-06, dated 18 December 2017 2017 IEA Report, WSP, February 2018 - Discussion with E&C Coordinator - Site Inspection - Enright Land Management Cost Estimate for tree planting, estimate no. 1092, dated 21 September 2018 - Email from ARA to Integra UG regarding removal of trees, dated 24 October 2019 - Email from Integra UG to ARA regarding tree species to be removed, dated 19 October 2020 - Integra UG MOD 8 Tree Planting Figure, dated 27 November 2020 - Email from Integra UG regarding 13,800 swamp oak trees to be planted, dated 21 October 2020 - Discussion with E&C Coordinator	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- Site Inspection - Email from Umwelt to Integra UG 'Outcomes of Bettys Creek ecological pre-clearance survey', dated 05 December 2017		
0103	SCH3 C32B	Water Pipeline Infrastructure The Proponent must ensure that the rehabilitation of land disturbed during construction of the water pipeline infrastructure focuses on the regeneration, enhancement and/or re-establishment of: (a) significant and/or threatened flora communities, including: - Central Hunter Ironbark — Spotted Gum — Grey Box Forest EEC; - Central Hunter Swamp Oak Forest; - Hunter Valley River Oak Forest; - Central Hunter Bulloak Forest; and (b) habitat and/or foraging resources for other significant and/or threatened flora and fauna species that occur in the vicinity of the disturbance area for the water pipeline infrastructure.	Rehabilitation was required for the installation of the Mount Owen Mine Water Pipeline and a gas drainage pipeline approved under modification 7. Rehabilitation of land disturbed during construction of the water pipeline infrastructure was conducted in accordance with the Integra UG Mining Operations Plan which was updated following approval of Modification 7 of PA 08_0101. The auditors reviewed rehabilitation monitoring reports prepared by Umwelt for rehabilitation monitoring conducted in 2018 and 2019. Rehabilitation of Main Creek and Bettys Creek was conducted in 2018 which aimed at enhancing the natural vegetation in the vicinity. Rehabilitation of Main Creek was reported to be consistent with the surrounding landscape. No habitat augmentation works were recommended at Main Creek as the site occurs in a grazed pasture. Rehabilitation monitoring conducted in December 2019 noted that there were signs that native grasses were beginning to colonise excavated areas but could be impacted by cattle crossing. As detailed against schedule 3 condition 32A like-for-like trees were planted at Bettys Creek which is situated within the threatened flora community - Central Hunter Swamp Oak Forest. The 2018 rehabilitation report recommended that, if possible, felled trees from the Bettys Creek Crossing should be evenly distributed across the disturbance area to reduce soil erosion by slowing down surface water runoff. In 2019 Integra conducted log distribution works to assist with reducing soil erosion, habitat restoration and canopy recolonisation. A summary of rehabilitation progress and monitoring is provided in Section 8 of the Annual Reviews. The annual reviews state that three general types of rehabilitation works have been completed across Integra UG to date: - Woodland rehabilitation areas in the rehabilitation overburden emplacement area - Gas well rehabilitation sites - Creek crossings where rehabilitation was required at Main Creek and Bettys Creek following the installation of the Mount Owen Mine Water Pipeline and gas drainage pipeline. A summary of rehabilitation status for gas well rehabilitation sites is provided in the Annual Review, however the Annual Review does not include a summary of the status of rehabilitation in the woodland rehabilitation areas or the creek crossings which relate specifically to the construction conducted as part of modification 7. Summary The auditors conclude that rehabilitation of disturbed land following construction of the water pipeline infrastructure has occurred and is being monitored as part of the annual rehabilitation monitoring that is taking place. Rehabilitation has included regeneration of impacted threatened flora communities, specifically the Central Hunter Swamp Oak Forest. No other significant and/or threatened flora and fauna species were identified in the vicinity of the disturbed area for the water pipeline infrastructure. Evidence: - Integra UG 2019 Annual Rehabilitation Monitoring Report, Umwelt, 14 October 2019 - Integra UG 2018 Annual Rehabilitation Monitoring Report, Umwelt, 22 February 2019 - Annual Reviews 2017, 2018 & 2019 - Site Inspection	Compliant	IEA OFI 13: It is suggested that the Annual Review report on the status of all rehabilitation conducted across Integra in particular rehabilitation of woodland rehabilitation areas and creek crossing rehabilitation.
0104	SCH3 C32C	Water Pipeline Infrastructure The Proponent must implement the mitigation and management measures specified in EA Mod 7 during construction of the water pipeline infrastructure,	Chapter 9 of the <i>Integra UG to Mount Owen Complex Water Pipeline Modification Environmental Assessment for Glencore Coal Pty Ltd</i> (Hansen Baily, 2017) outlines a summary of management and mitigation measures to recommended for implementation during the construction of the water pipeline infrastructure.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		including avoiding disturbance of stags, hollow bearing trees and the Bettys Creek Habitat Management Area.	With regards to biodiversity the EA recommended that <i>“Removal of hollow-bearing trees, proximate stags and larger trees (truck diameter >10m) will be avoided wherever practicable”</i>. The auditors sighted the MOD 7 GDP which required a pre-clearance survey to be conducted as part of the GDP approval process. Integra UG engaged Umwelt to conduct pre-clearance surveys of the area in order to identify habitat trees. Four habitat trees were identified outside of the proposed pipeline track, these trees were avoided during construction of the pipeline. Evidence: GDP GD-17-10-04-12-24, dated 02 January 2018 Integra UG to Mount Owen Complex Water Pipeline Modification Environmental Assessment for Glencore Coal Pty Ltd, ref 170605, Hansen Bailey, dated June 2017		
HERITAGE					
0105	SCH3 C32D	Protection of Aboriginal Heritage Items Unless otherwise authorised under the <i>National Parks and Wildlife Act 1974</i>, the Proponent must ensure that the development does not cause any direct or indirect impact on identified Aboriginal heritage items located outside the approved disturbance area of the development.	Integra UG’s E&C Coordinator stated that no disturbance work occurred outside of the project approval boundary during the audit period. The auditors sighted the following to verify this statement: - Completed GDPs showing demarcation of disturbance footprint, identification of heritage items and heritage clearance certificate requirements. - Evidence of external consultants OzArk attending site during surface disturbance works and issuing heritage clearance certificates. - Aboriginal assessments prepared by external consultant OzArk prior to ground disturbance associated with MOD 8 construction occurring. - Complaints register showing nil complaints received in relation to heritage. - Incident register showing nil incidents recorded in relation to heritage. - Subsidence monitoring results indicating nil impacts to heritage items. - GDP for surface disturbance works includes section on heritage (Part 5) which triggers a heritage clearance certificate requirement. OzArk are contracted to conduct heritage clearance certificates. Evidence: - GDP GD-19-06-03-10-46, dated 01 July 2019 - Aboriginal due diligence archaeological assessment, Ozark, dated 25 November 2018 - Integra UG Complaints register (audit period) - Integra UG Incident register (audit period) - OzArk Aboriginal cultural heritage assessment, installation of LW16 infrastructure Due Diligence report, dated 25 November 2018 - Site Inspection - Discussion with Integra UG E&C Coordinator	Compliant	
0106	SCH3 C33	The Proponent must prepare a Heritage Management Plan for the project to the satisfaction of the Secretary. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	<u>Heritage Management Plan Approval</u> The requirement for a Heritage Management Plan (HMP) to be developed has been addressed in two management plans developed by Integra. This includes the Historic Heritage Management Plan (HHMP, Document No. INTUG-263795162-24, version 3.0, dated 10 September 2018) and the Aboriginal Heritage Management Plan (AHMP, Document No. INTUG-263795162-23, version 3.0, dated 10 September 2018). Both plans were initially approved by the Department on 06 April 2017 and were revised and resubmitted for approval by the Department following approval of Modification 8 of PA 08_0101. The Department approved the latest versions of the HHMP and AHMP on 10 September 2018.	Compliant	IEA OFI 14: It is suggested that during the plan’s next revision the wording in paragraph 1 of Section 4.2 of the Aboriginal Heritage Management Plan be updated to reflect that management of fencing and signage in the Bettys Creek

		<u>Heritage Management Plan Implementation</u> Aboriginal Heritage Management Plan A review of the implementation of the controls outlined in the Aboriginal Heritage Management Plan (AHMP) was conducted in order to verify if the plan was being adequately implemented during the audit period. The following was identified from the review: • Five aboriginal heritage sites were located within the Modification 8 assessment boundary. These sites were assessed by OzArk in 2017. As part of the GDP prepared for construction works associated with modification 8, sites with cultural significance were identified in Part 5 of the GDP and were required to be avoided during construction. • An Aboriginal due diligence archaeological assessment was prepared for the powerline installation approved under modification 8. The assessment was prepared prior to any disturbance works were conducted and referred to during the preparation of the GDP. • OzArk archaeologists were present on site during ground disturbance works within 50m of Bettys Creek. • An Aboriginal Cultural Heritage Working Group is held twice a year and chaired by MOC, with Integra UG in attendance. The auditors sighted meeting minutes and a PowerPoint presentation showing that Registered Aboriginal Parties (RAPs) were informed of the works associated with modification 8. • Quarterly monitoring of Aboriginal heritage items is conducted by OzArk whereby as many sites as possible within a quadrant are inspected by an archaeologist and representatives of the MOC RAPs. The monitoring aims to conduct a large and representative sample of all heritage sites over the calendar year. Quarterly monitoring reports are provided on the Integra UG Public Website. Results from the monitoring reports are summarised in the Annual Reviews. • The status of arc sites which were destroyed in the 2017 audit period by the previous mine operator has not been updated in the AHMP. The auditors conclude that the AHMP was being adequately implemented during the audit period. Historical Heritage Management Plan The implementation of the controls outlined in the Historical Heritage Management Plan (HHMP) was conducted in order to verify if the plan was being adequately implemented during the audit period. The following was identified from the review: • It is noted that no historical heritage sites or items have been identified within the Integra UG project area and as such the potential for historical archaeological items to be present and impacted by mining is low. No specific monitoring measures are considered necessary. • A review was conducted of the GDPs in place during ground disturbance works associated with Modification 8 construction. No historical heritage items were identified on the GDP plans appended to the GDP. The majority of the controls outlined in the HHMP were not triggered during the audit period. The auditors conclude that the HHMP was being adequately implemented as required during the audit period. Complaints management The auditors reviewed the Integra UG complaints register for the audit period. No complaints were received in relation to heritage. Incident Management A review of incidents recorded in Integra's internal database CMO during the audit period was conducted by the auditors. No incidents were recorded in relation to heritage. Reporting A summary of heritage management is included in the Annual Reviews. Summary The auditors conclude that the AHMP and HHMP were generally being adequately implemented during the audit period.	habitat Management Area is the responsibility of Mount Owen. IEA OFI 15: It is suggested that the status of the arc sites which were destroyed by the previous operator be updated in the AHMP
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Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Evidence: - Letter from the Department 'Integra Underground Project Environmental Management Plans', dated 10 September 2018 - Interview with Integra UG E&C Coordinator - Letter from OEH Heritage Division 'Historical Heritage Management Plan Approval', dated 29 June 2018 - Aboriginal Due Diligence Archaeological Assessment, Additional Disturbance Areas for 66kV Powerline and Access Road Construction, IUM, OzArk, dated 25 November 2018 - Integra incident register (audit period) - Integra complaints register (audit period) - Aboriginal Cultural Heritage Monitoring Reports 2017-2020 2018 & 2019 Annual Reviews - Site Inspection - CMO E&C Weekly Surface Inspections - GDP CAA HSEC PER 004, GD-17-12-18-09-06, dated 18 December 2017 - GDP Inspection – Clearing of trees for powerline construction, dated 30 September 2019 - MOC and Integra UG ACHWG Meeting Minutes, dated 26 April 2018 - Letter to Giwiirr Consultants, Aboriginal Heritage Management Plan Revision, dated 21 June 2018 - Letter to Tocomwall, Aboriginal Heritage Management Plan Revision, dated 21 June 2018 - Letter to Singleton Historical Society & Museum, Management Plan Revision, dated 21 June 2018		
0107	SCH3 C33a	This plan must: (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary;	The Department endorsed the appointment of Pamela Kottaras, of EMM Consulting Pty Limited (EMM) to prepare the HMP on 19 December 2016. Evidence: Letter from the Department titled 'Approval of experts' dated 19 December 2016	Compliant	
0108	SCH3 C33b	This plan must: (b) be prepared in consultation with OEH, the Aboriginal community, the Heritage Division, Council, local historical organisations and any relevant landowners;	The auditors identified the following with regards to consultation conducted: - Adequate consultation with all required agencies and parties was conducted during the plan's initial development, as documented in the 2017 IEA report and verified through review of consultation evidence. - Evidence of Singleton Council providing feedback on the revised HHMP and AHMP was reviewed by the auditors. - Integra UG requested feedback on the revised Historical Heritage Management Plan on 21 June 2018. The OEH Heritage Division replied on 29 June 2018 noting they were satisfied the plan addresses the impacts on archaeological sites and provides appropriate measures to mitigate the impacts identified. - Evidence that consultation was requested from the Aboriginal community, Singleton Historical Society, or any relevant landowners during the update of the plan following MOD 8 approval was provided. Evidence: - Email from Singleton Council dated 11 July 2018 regarding management plans – for comment. - Letter from OEH dated 28 November 2017 regarding consultation for HMP - Email from Singleton Council dated 15 November 2017 regarding consultation for HMP - Email from Aboriginal community Wonnarua Nation Aboriginal Corporation, dated 22 November 2017 regarding consultation for HMP - Letter from OEH heritage division, dated 28 November 2017 regarding consultation for the HMP	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- Letter from OEH Heritage Division 'Historical Heritage Management Plan Approval;', dated 29 June 2018 - Letter from Singleton Historical Society and Museum dated 09 February 2017 regarding consultation for HHMP - Consultation request letters to Aboriginal community and Singleton Historical Society, dated 21 June 2018		
0109	SCH3 C33c	This plan must: (c) be submitted to the Secretary for approval;	The HHMP and AHMP were submitted to the Secretary for approval on 07 September 2018. The Department approved the revised HHMP and AHMP on 10 September 2018. Evidence: Letter from the Department 'Integra UG Project Environmental Management Plans', dated 10 September 2018	Compliant	
0110	SCH3 C33d	This plan must: (d) include the following for the management of Aboriginal cultural heritage on site: - details regarding the measures to be implemented to avoid (as far as practicable) and manage Aboriginal cultural heritage on site; - an Aboriginal cultural heritage education program, to be developed in consultation with all relevant registered Aboriginal parties, and used for the induction of all personnel and contractors involved in construction or surface disturbance activities; - methods for recording, salvaging and/or managing all Aboriginal sites, objects and deposits that are to be destroyed within the project area; - methods for conserving, managing and monitoring all Aboriginal sites, objects and deposits that are to be protected within the project area; - maintaining and managing access to Aboriginal sites, objects and deposits by the Aboriginal community, including provision of an appropriate Keeping Place; - managing the discovery of any new Aboriginal sites, objects or skeletal remains identified during the project; and - ongoing consultation and involvement of the Aboriginal community in the conservation and management of Aboriginal cultural heritage values on the site.	The AHMP adequately addresses these requirements in the following sections: - Section 4 of the AHMP outlines the measures to be implemented to protect Aboriginal sites. - Section 5.4.2 of the AHMP outlines that Integra UG will utilise the Aboriginal cultural heritage education program which was developed by MOC in consultation with Registered Aboriginal Parties (RAPs). - Section 5.2 of the AHMP outlines how Aboriginal sites will be recorded, salvaged or excavated. - Section 5 and Section 6 of the AHMP addresses the requirement to include methods for conserving, managing and monitoring all Aboriginal sites, objects and deposits. - Section 4.4 of the AHMP describes the artefact records and storage facility. - Section 2.3 of the AHMP outlines how access to Aboriginal sites and storage objects will be permitted. - Section 5.3 of the AHMP outlines the process to be implemented for chance finds including human remains. - Ongoing consultation with the Aboriginal community is outlined in Section 2 of the AHMP. Evidence: - AHMP	Compliant	
0111	SCH3 C33e	This plan must: (e) include programs/ procedures for the following, in accordance with the applicable guidelines of the Heritage Division: - archival recording of any other heritage items to be destroyed by the project; - conserving, managing, monitoring, and where appropriate, relocating any non-Aboriginal sites, objects and deposits on the site; - interpreting the findings of the additional heritage or archaeological investigations carried out on the site; and - managing the discovery of any new non-Aboriginal objects or skeletal remains identified during the project.	Section 3 and 4 of the HHMP addresses these requirements. Evidence: HHMP	Compliant	
VISUAL					
0112	SCH3 C34	Visual Amenity and Lighting The Proponent must: (a) implement all reasonable and feasible measures to mitigate visual and off-site lighting impacts of the project; (b) ensure no unshielded outdoor lights shine above the horizontal; and	(a) A lighting and visual amenity audit was conducted by Hansen Bailey in 2017, as documented in the 2017 IEA report. No changes have been made to lighting on site which would affect visual and off-site lighting impacts of the project during the audit period. A review of complaints and incidents recorded during the audit period showed that no complaints or incidents were recorded in relation to lighting or amenity during the audit period.	Compliant	IEA OFI 16: It is recommended a summary of lighting and visual impacts is made in the annual review each year. To ensure visual amenity and lighting on site at

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		(c) ensure that all external lighting associated with the project complies with Australian Standard AS4282 (INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting, or its latest version, to the satisfaction of the Secretary.	The audit site inspection identified that the Integra UG mine's portal area is set below road level and therefore presents very minimal risk of direct and in direct offsite lighting from Integra UG's operations. (b) As detailed against schedule 3 condition 34(a), no changes have been made to on site lighting during the audit period. (c) As detailed against schedule 3 condition 34(a), no changes have been made to on site lighting during the audit period. The lighting audit conducted in 2017 confirmed compliance with <i>AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting</i>. Evidence was not provided to verify if visual amenity and lighting on site was to the satisfaction of the Secretary, as required by Schedule 3, Condition 34. As there has been no significant changes to fixed lighting since the 2017 Lighting and Visual Amenity Audit and no complaints recorded during this audit period relating to lighting or visual amenity the auditors consider Integra UG are complying with the requirements of Schedule 3, Condition 34(a-c). Evidence: - Lighting and Visual Amenity Audit Report, Hansen Baily dated 14 September 2017 - Site Inspection 2017 IEA Report, WSP, dated 19 February 2018		Integra UG is to the satisfaction of the Department
0113	SCH3 C35	Additional Visual Mitigation Measures Upon receiving a written request from the owner of any residence on privately-owned land which has significant direct views of the underground mining operations on site, the Proponent must implement additional visual mitigation measures (such as landscaping treatments or vegetation screens) on the land in consultation with the landowner. These measures must be reasonable and feasible, and directed towards minimising the visibility of the mining operations from the residence. 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.	This condition was not triggered during the audit period.	Not Triggered	
WASTE					
0114	SCH3 C36(a)	The Proponent must: (a) minimise and monitor the waste generated by the project; and	Integra UG have developed an internal Waste Management Plan to outline the requirements for management of waste produced across the site. The plan aims to ensure compliance with project approval conditions as well as Glencore's corporate Waste Management Protocol. Waste is managed in accordance with the Integra UG Waste Management Plan. Waste management on site is undertaken by contractors JR Richards. JR Richards provides monthly waste data which includes a breakdown of the types of waste collected for disposal or recycling. Integra UG maintains a waste tracking spreadsheet as a corporate requirement which must be reported to Glencore Corporate on a monthly basis. The waste management plan identifies waste streams, waste monitoring and tracking procedures and details management measures to ensure the generation of waste is minimised and recycling of waste is maximised where practicable. Evidence: 2017, 2018, 2019 Annual Reviews - Site Inspection - HVCC Underground Monthly Summary Report, JR Richards Waste Data Spreadsheet 2020 - HVCC Underground Monthly Summary Report, JR Richards Waste Data Spreadsheet 2019 - Waste Management Plan INTUG-793190785-874, Version 2.0, dated 07 February 2020 2020 Waste Tracking, NSW EPA Online Waste Tracking System, dated 18 June 2020 and 04 September 2020	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
0115	SCH3 C36(b)	(b) ensure that the waste generated by the project is appropriately stored, handled, and disposed of;	Evidence of waste segregation was observed during the audit site inspection. Separate bins for batteries, scrap metal, recycling, oil filters and cardboard recycling were observed. Evidence: Refer to evidence against schedule 3 condition 36(a)	Compliant	
0116	SCH3 C36(c)	(c) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and	Integra UG has an on-site sewage treatment system (OSSM Approval Number 3969/2008), which includes a primary aeration tank with a secondary maturation pond and a package sewage treatment plant. Wastewater from the system is dispersed by irrigation sprays on dedicated irrigation areas. Monitoring is conducted on wastewater processed by the sewage treatment system for pH and faecal coliforms in accordance with Council Approval 3969/2008 and EPL 3390 Condition M2.2. Evidence: Refer evidence against schedule 3 condition 36(a)	Compliant	
0117	SCH3 C36(d)	(d) report on waste management and minimisation in the Annual Review,	Waste management and minimisation is reported annually in Section 6.7 of the Annual Reviews. Following submission of the 2019 Annual Review the Department requested Integra UG include a comparison of waste generated by the development in previous years to assist the identification of trends in waste generated, and report on waste minimisation measures implemented during the reporting period. Integra UG updated section 6.7 and resubmitted the Annual Review to the Department on 05 June 2020. The Department approved the revised 2019 Annual Review on 10 June 2020. Evidence: Refer evidence against schedule 3 condition 36(a)	Compliant	
0118	SCH3 C36	to the satisfaction of the Secretary.	As detailed above waste management and minimisation is reported annually in Section 6.7 of the Annual Reviews. The Department review and approve the Annual Reviews each year. The auditors consider this evidence satisfactory to validate approval from the Secretary as required under this condition. Evidence: Refer evidence against schedule 5 condition 11	Compliant	
BUSHFIRE MANAGEMENT					
0119	SCH3 C37	The Proponent must: (a) ensure that the project is suitably equipped to respond to fires on site; and (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.	(a) Integra UG maintains a bushfire management plan which was developed in consultation with Eco Logical Australia who assisted with identification of asset protection zones, fuel loads and management measures. Integra UG also maintains a safety management system which includes an emergency response manual. Section 13 of the emergency response manual includes a bushfire action plan. The plan also incorporates the requirements of the Pollution and Incident Response Management Plan (PIRMP). Controls sighted by the auditors for bushfire management include: - An established first response team who assess all emergency incidents - No smoking policy on site - Maintenance of access tracks - Fire extinguishers - Water carts - Maintained water fill points. It is noted that while Integra UG have various controls in place to manage fire, the auditors are not fire safety engineers and as such are not qualified to determine if a site is equipped to	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation																		
			respond to any type of fire on site. As such, the findings in this audit report should not be relied upon to validate the site's fire safety status. (b) Not Triggered. It was reported that there were no fires in the vicinity of the site during the audit period whereby Integra UG was required to assist the RFS and emergency services. Evidence: - Site Inspection - Integra UG Emergency Response Manual, INTUG-263795162-195, Version 12.0 dated 12 May 2020 - Integra UG Pollution and Incident Response Management Plan, INTUG-793190785-47, Version 7.0 dated 03 April 2020 - Integra UG Bushfire Management Plan																				
REHABILITATION																							
0120	SCH3 C38	The Proponent must rehabilitate the site in a manner that is generally consistent with the rehabilitation strategy described in the documents referred to in conditions 2 or 3 of Schedule 2 and the objectives in Table 12. Table 11 <table><tr><th>Area/Domain</th><th>Rehabilitation Objectives</th></tr><tr><td>Site (as a whole)</td><td>Safe, stable & non-polluting</td></tr><tr><td>Surface infrastructure</td><td>To be decommissioned and removed, unless DRG agrees otherwise</td></tr><tr><td>Other land affected by the project</td><td>Restore ecosystem function, including maintaining or establishing self-sustaining eco-systems comprised of: - local native plant species (unless DRG agrees otherwise); and - a landform consistent with the surrounding environment </td></tr><tr><td>Glencore Mt Owen Bettys Creek Diversions</td><td>Rehabilitate to the same or better geotechnical, geomorphic and ecological condition as prior to mining, unless the owner agrees otherwise</td></tr><tr><td>Sections of Bettys Creek and Main Creek to be undermined</td><td>Hydraulically and geomorphologically stable, with diverse habitats and ecology</td></tr><tr><td>Creek Diversions</td><td>Hydraulically and geomorphologically stable, with diverse habitats and ecology</td></tr><tr><td>Built features</td><td>Repair to pre-mining condition or equivalent unless: - the owner agrees otherwise; or - the damage is fully restored, repaired or compensated for under the <i>Mine Subsidence Compensation Act 1961</i> </td></tr><tr><td>Community</td><td> - Ensure public safety - Minimise the adverse socio-economic effects associated with mine closure </td></tr></table>	Area/Domain	Rehabilitation Objectives	Site (as a whole)	Safe, stable & non-polluting	Surface infrastructure	To be decommissioned and removed, unless DRG agrees otherwise	Other land affected by the project	Restore ecosystem function, including maintaining or establishing self-sustaining eco-systems comprised of: - local native plant species (unless DRG agrees otherwise); and - a landform consistent with the surrounding environment	Glencore Mt Owen Bettys Creek Diversions	Rehabilitate to the same or better geotechnical, geomorphic and ecological condition as prior to mining, unless the owner agrees otherwise	Sections of Bettys Creek and Main Creek to be undermined	Hydraulically and geomorphologically stable, with diverse habitats and ecology	Creek Diversions	Hydraulically and geomorphologically stable, with diverse habitats and ecology	Built features	Repair to pre-mining condition or equivalent unless: - the owner agrees otherwise; or - the damage is fully restored, repaired or compensated for under the <i>Mine Subsidence Compensation Act 1961</i>	Community	- Ensure public safety - Minimise the adverse socio-economic effects associated with mine closure	The rehabilitation strategies outlined in the mine's environmental assessments and other documents referenced in Schedule 2, Conditions 2 and 3 and those listed in Table 11 of PA 08_0101 have been incorporated into the approved MOP for the project. Site – Rehabilitation observed during site inspection and as detailed in Annual Reports validated that the site was generally safe, stable and non-polluting. Refer to summary of rehabilitation conducted during the audit period provided against Schedule 3, Condition 40. Surface Infrastructure – Table 6-1 of the MOP requires the following infrastructure to be decommissioned and removed: - Exploration infrastructure – disused infrastructure is identified progressively throughout the year and also formally during the annual rehabilitation monitoring. This includes identification and removal of power poles, temporary fencing, pipework or signage. - Carbonaceous material, concrete and bitumen removed from the footprint of the ROM stockpile area – this had not commenced at the time of the audit as mining was still underway (Not Triggered) - Roads, tracks and hardstand areas (Not Triggered) - Portal entry (Not Triggered) - Site servicing infrastructure (Not Triggered) - Gas drainage pipelines and flares (Not Triggered) - Gas drainage boreholes; rehabilitation of boreholes commenced during the audit period. - Gas well items; rehabilitation of redundant gas wells commenced during the audit period. The auditors sighted rehabilitated gas well LW11-8 located at the end of Forrest Road during the audit site inspection. Other land affected by the project – No rehabilitation was conducted or identified as required at land outside of the project approval boundary. No subsidence impacts were identified which required remediation during the audit period. Glencore Mount Owen Bettys Creek Diversions – Rehabilitation of the Mount Owen Bettys Creek diversion was primarily centred around the planting of compensatory trees and rehabilitation of the area impacted from construction of the water transfer pipeline (Modification 7) Sections of Bettys Creek and Main Creek to be undermined – Rehabilitation was conducted at Main Creek and Bettys Creek following the installation of the Mount Owen Mine Water Pipeline and gas drainage pipeline. No subsidence impacts were identified during the audit period which triggered rehabilitation work at Bettys or Main Creeks. In addition, Main Creek was not undermined during the audit period.	Compliant	
Area/Domain	Rehabilitation Objectives																						
Site (as a whole)	Safe, stable & non-polluting																						
Surface infrastructure	To be decommissioned and removed, unless DRG agrees otherwise																						
Other land affected by the project	Restore ecosystem function, including maintaining or establishing self-sustaining eco-systems comprised of: - local native plant species (unless DRG agrees otherwise); and - a landform consistent with the surrounding environment																						
Glencore Mt Owen Bettys Creek Diversions	Rehabilitate to the same or better geotechnical, geomorphic and ecological condition as prior to mining, unless the owner agrees otherwise																						
Sections of Bettys Creek and Main Creek to be undermined	Hydraulically and geomorphologically stable, with diverse habitats and ecology																						
Creek Diversions	Hydraulically and geomorphologically stable, with diverse habitats and ecology																						
Built features	Repair to pre-mining condition or equivalent unless: - the owner agrees otherwise; or - the damage is fully restored, repaired or compensated for under the <i>Mine Subsidence Compensation Act 1961</i>																						
Community	- Ensure public safety - Minimise the adverse socio-economic effects associated with mine closure																						

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Creek Diversions – Not Triggered as the creek diversions are required should mining commence in the Hebden or Barret Seams. At the time of the audit this had not occurred and was not planned to occur. Built Features – No repairs were required of built features during the audit period. Community – The risk of the public accessing the extraction area during the audit period is low due to the land being privately owned by Glencore. Signage was observed during the audit period referencing subsidence and active mining. In addition, no community complaints were recorded during the audit period. Summary The auditors conducted a detailed review of the implementation of the MOP which required review of the rehabilitation objectives listed in Table 12 of PA 08_0101. The findings from this review are documented against schedule 3, Condition 40. In summary Integra was generally complying with the rehabilitation objectives listed in Table 12 of PA 08_0101. Evidence: • Site inspection • Schedule 3, Condition 40. • Integra UG 2019 Annual Rehabilitation Monitoring Report, Umwelt, 14 October 2019 • Integra UG 2018 Annual Rehabilitation Monitoring Report, Umwelt, 22 February 2019 • Annual Reviews 2017, 2018 & 2019 • Complaints Register (audit period)		
0121	SCH3 C39	Progressive Rehabilitation The Proponent must carry out rehabilitation of the site progressively, that is, as soon as reasonably practicable following the disturbance.	Progressive rehabilitation is conducted in accordance with the site wide MOP. Integra have in place a Progressive Rehabilitation of Gas Wells and Surface Infrastructure Procedure which has been developed to track progressive rehabilitation of gas wells and other surface gas drainage infrastructure to minimise the rehabilitation required after closure of the mine. Rehabilitation of gas wells and surface gas drainage infrastructure is undertaken progressively throughout the mine life to minimise rehabilitation that is required after closure of the mine. The auditors sighted evidence of gas wells and other surface infrastructure which had been progressively rehabilitated throughout the audit period. This included the following: • Rehabilitation of disturbed surface areas at the vent shaft 3 site which was constructed during the audit period following approval of modification 8 of PA 08_0101. • Rehabilitation of Gaswell site 13-3. Rehabilitation of this gaswell site commenced in February 2020. The auditors sighted the approved GDP for the rehabilitation works. • Rehabilitation of Bettys Creek which included compensatory planting of <i>Casuarina glauca</i> in the riparian zone following the construction of the water transfer pipeline approved under modification 7 of PA 08_0101. Integra UG review the gas wells each quarter to determine the operational need for each gas well. When a gas well is deemed to be no longer required for future operations it is rehabilitated. Rehabilitation progress is monitored annually by external consultant's Umwelt and reported in an annual rehabilitation monitoring report. The 2018 and 2019 rehabilitation monitoring reports were reviewed by the auditors. In addition, a summary of the rehabilitation monitoring results is provided in the Annual Reviews. Progressive rehabilitation was considered to have been adequately in place during the audit period. Evidence: • Site inspection • Progressive Rehabilitation of Gas Wells and Surface Infrastructure (INTUG-793190785-1189), version 10.0, dated 08 October 2020	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation																									
0122	SCH3 C40	Rehabilitation Management Plan The Proponent must prepare a Rehabilitation Management Plan for the project to the satisfaction of the DRG. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	- GDP 13-3 Rehabilitation, dated 25 February 2020 - Integra UG 2019 Annual Rehabilitation Monitoring Report, Umwelt, 14 October 2019 - Integra UG 2018 Annual Rehabilitation Monitoring Report, Umwelt, 22 February 2019 - Annual Reviews 2017, 2018 & 2019 <u>Rehabilitation Management Plan Approval</u> Schedule 3 Condition 40 of PA 08_0101 outlines the requirement to prepare a Rehabilitation Management Plan for Integra Underground. The MOP has been prepared to cover this requirement. Following approval for recommencement of operations in 2017 Integra prepared and submitted to Resource Regulator (RR) a MOP which covered the period of 01 January 2017 to 31 December 2018. RR approved this MOP on 30 November 2016. A new MOP was prepared in 2018 which covered the period 01 November 2018 to 31 December 2023. The MOP was submitted to the RR in November 2018 following the approval of modification 8 to PA 08_0101 and approved on 19 November 2018. The 2018-2023 MOP was amended in 2018 and resubmitted to the RR for approval as MOP Amendment A (Version 1). The RR issued a ‘Notice of Refusal’ letter regarding MOP Amendment A (Version 1) on 08 April 2019. The RR requested a number of changes and additional information be provided, this is outlined in detail in Section 1.1.5 of the MOP. Integra resubmitted the MOP Amendment a (Version 2) to the RR which was subsequently approved by the RR on 31 May 2019. Administrative changes were made to the MOP in 2020 resulting in MOP Amendment B being issued to the RR for approval. The latest revision of the MOP, MOP Amendment B, was approved by RR on 28 July 2020. Evidence of consultation with the Department, OEH, DoI Water, Council and CCC was provided for the latest revision. <u>Rehabilitation Management Plan Implementation Review</u> A review of the implementation of the MOP was conducted as part of the 2020 IEA. MOP Performance Criteria Performance indicators and completion/relinquishment criteria have been outlined in Section 6 of the MOP. Integra track annual performance against these indicators and criteria in the annual rehabilitation monitoring reports prepared by Umwelt during the audit period. A summary of rehabilitation progress and monitoring results is also provided in the Annual Review. Summary of rehabilitation conducted during the audit period Rehabilitation data is summarised in the table below, as documented in the Rehabilitation Monitoring Reports and the Integra UG Annual Reviews. <table><tr><th>Year</th><th>Annual Disturbance Area (ha)</th><th>Cumulative Total Disturbance Area (ha)</th><th>Total Rehabilitation Area (ha per MOP Year)</th><th>Cumulative Rehabilitation Area (ha during MOP term)</th></tr><tr><td>2017</td><td>3.2</td><td>91</td><td>0.5</td><td>10.7</td></tr><tr><td>2018</td><td>4.66</td><td>95.66</td><td>0.41</td><td>8.12¹</td></tr><tr><td>2019</td><td>13.44</td><td>109.1</td><td>2.25</td><td>10.37</td></tr><tr><td>2020</td><td colspan="4">Figures not available at the time of the audit.</td></tr></table> Note 1 Calculation of cumulative areas recommence with new MOP for 2018-2023 2017 – Rehabilitation conducted was in accordance with the predictions made in the 2017-2018 MOP.	Year	Annual Disturbance Area (ha)	Cumulative Total Disturbance Area (ha)	Total Rehabilitation Area (ha per MOP Year)	Cumulative Rehabilitation Area (ha during MOP term)	2017	3.2	91	0.5	10.7	2018	4.66	95.66	0.41	8.12 ¹	2019	13.44	109.1	2.25	10.37	2020	Figures not available at the time of the audit.				Compliant	IEA OFI 17: It is recommended the Annual Review clearly outlines the total land disturbed each year. Alternatively, Table 38 of the Annual Reviews should clearly outline that the Total Disturbance Area is a cumulative figure.
Year	Annual Disturbance Area (ha)	Cumulative Total Disturbance Area (ha)	Total Rehabilitation Area (ha per MOP Year)	Cumulative Rehabilitation Area (ha during MOP term)																										
2017	3.2	91	0.5	10.7																										
2018	4.66	95.66	0.41	8.12 ¹																										
2019	13.44	109.1	2.25	10.37																										
2020	Figures not available at the time of the audit.																													

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			2018 – Total cumulative rehabilitation area conducted in 2018 (8.12 ha) was less than the predictions made in the 2018-2023 MOP (12.6 ha). The cumulative predicted disturbance area was 2.22 ha less than the predictions made in the 2018-2023 MOP. Integra UG stated in the 2018 Annual Review that <i>“Refinements to the site GIS have identified that rehabilitation is less than predicted in the MOP, this will be aligned in future updates to the MOP”</i>. The MOP was updated in 2018 and 2019. The updates included amendments to the predicted rehabilitation and disturbance rates during 2018 and 2019. Total cumulative rehabilitation area predicted for 2018 was increased to 13.1 ha, indicating the cumulative rehabilitation area was 4.98ha below predictions. The 2018 Rehabilitation Monitoring report stated that <i>“Monitoring surveys were conducted during December 2018. At the time, this area of the Hunter Valley was classified as being drought affected by the Department. This was the result of a prolonged period with lower than average rainfall. Dry conditions combined with hotter than average temperatures have influenced the 2018 monitoring results.”</i> 2019 – Total cumulative rehabilitation area in 2019 (10.37ha) was less than the predictions made in the 2018-2023 MOP (11.2 ha). The total disturbance area in 2019 was 13.44 ha which is below the predictions made in the 2018-2023 MOP. 2020 – Rehabilitation predictions for 2020 have not been made in the 2018-2023 MOP. Integra UG state that predictions will be confirmed in Annual Review plans for 2020. At the time of the audit period conclusion rehabilitation figures were not available. The auditors were provided with a GIS figure showing disturbed and rehabilitation land as of October 2020. The figure showed rehabilitation at Fan Site 3 and at various gas well sites across the site, as verified during the audit site inspection. Annual rehabilitation monitoring had not occurred for 2020 at the time of the audit inspection and should be reviewed in the next audit period. Rehabilitation Monitoring Section 8 of the MOP outlines the rehabilitation monitoring required during the MOP term. The following is required: Annual review of rehabilitation quality: Annual rehabilitation monitoring was conducted by Umwelt in 2018 and 2019. Rehabilitation monitoring for 2020 had not been conducted at the time of the audit inspection. The auditors reviewed GIS data showing rehabilitated and disturbed land across the Integra UG surface area. Quarterly weed and pest monitoring between 2018-2020 and then annual monitoring after this: Integra UG engaged Enright Land Management to conduct weed and pest management services during the audit period. An annual completed weed works report is prepared by Enright which summarises the weed and pest work conducted as part of the ongoing weed control program. Pest management was conducted during the audit period by Enright to manage wild dogs and fox populations. Specifically, 1080 wild dog and fox baiting programs were carried out in 2019. Additional bating programs were recommended to be carried out biannually on site. The site inspection identified Spear Thistle (<i>Cirsium vulgare</i>) and Galenia (<i>Galenia pubescens</i>) infestations in open grasslands along disturbed areas of ground close to GW 11-8. Evidence of weed management was sighted in various other locations across the mine surface and it is understood that Enright were conducting progressive ongoing weed management of Spear Thistle and Galenia using foliar spray methods. Quarterly assessment of erosion on site for the first year (2018) and then annually after this. Inspections are also required to be opportunistic after significant rainfall events: Integra UG conduct monthly environmental inspections of all surface areas. This includes obtaining general observations relating to erosion. In addition, pre and post rainfall inspections are also undertaken by the Integra UG E&C department. Rehabilitation Reporting A summary of rehabilitation monitoring and reporting is provided in the Annual Reviews. The auditors reviewed the data presented in the 2017, 2018 and 2019 Annual Reviews and notes the following:		

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- In 2017 Table 36 of the Annual Review stated the total disturbance area as 3.2 (ha) indicating that this was the total disturbance area for the year and not the cumulative disturbance area of the site (which was reported in Table 35). - In 2018 and 2019 the same table (now Table 38 of the Annual Review) reported the total disturbance area to be 95.66 ha and 109.1 ha respectively. Discussion with Integra UG indicated that these figures were reporting the cumulative disturbance area opposed to the disturbance area for the year. The 2018 and 2019 Annual Reviews do not specify the annual disturbance area. It is noted that the cumulative disturbance area is already being reporting in Table 46 of the Annual Reviews and the current presentation of data makes it difficult to compare annual disturbance predictions made in the MOP (which are provided in Table 47) to actual annual figures. The audit findings conclude that Integra UG is effectively implementing the management measures outlined in the MOP. An OFI has been made with regards to reporting of rehabilitation data in the Annual Reviews. Evidence: - MOP Amendment B - Integra UG 2019 Annual Rehabilitation Monitoring Report, Umwelt, 14 October 2019 - Integra UG 2018 Annual Rehabilitation Monitoring Report, Umwelt, 22 February 2019 - Annual Reviews 2017, 2018 & 2019 - Site Inspection - Letter from the Department, Rehabilitation Management Plan/Mining Operations Plan, dated 02 December 2020 - Email from OEH (now DPIE Biodiversity and Conservation Division), Mining Operations Plan, dated 11 December 2020 - Letter to DoI Water (now National Resources Access Regulator), Rehabilitation Management Plan, dated 21 October 2020 - Letter to Singleton Council, Rehabilitation Management Plan, dated 21 October 2020 - CCC Meeting Minutes, Management Plans and Audits, dated 29 October 2020		
0123	SCH3 C40a	This plan must: (a) be prepared in consultation with the Department, OEH, DoI Water, Council and the CCC;	Section 1.4 of the MOP outlines the consultation conducted during preparation and update the MOP. It includes the following summary: <i>The existing consultation includes but is not limited to the following key components:</i> <i>A 24-hour community hotline – this service aims to promptly and effectively address community concerns;</i> <i>Amalgamation of the Integra Underground Community Consultative Committee (CCC) with the Mt Owen Complex CCC – currently meets twice per year to discuss environmental management and any matter raised by members on behalf of the community;</i> <i>Integra Underground website – includes updates on current and future operations, including past and present environmental monitoring results;</i> <i>Glencore Greater Ravensworth Area Newsletters – these are prepared bi-annually and circulated to disseminate information on Glencore’s operations in the area, including Integra Underground; and</i> <i>Management of a complaints register – to record complaints and steps to follow up complaints.</i> The following revisions of the MOP have occurred during the audit period, as detailed against Schedule 3, Condition 40 above: - A new MOP was prepared in 2018 for the period 2018 to 2023 - MOP Amendment A - MOP Amendment B Evidence of consultation being requested from RR, Singleton Council and Department of Environment, Energy and Science (EES) for MOP Amendment B was provided. Evidence of the	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			CCC being informed of the updates made in MOP Amendment B on 29 October 2020 was also provided. Evidence: - MOP Amendment B - Letter to EES, Management Plan Updated, dated 21 October 2020 - Letter to RR, Management Plan Updated, dated 21 October 2020 - Letter to Singleton Council, Management Plan Updated, dated 21 October 2020 - CCC Meeting minutes (Page 6), dated 29 October 2020		
124	SCH3 C40b	This plan must: (b) be submitted to the DRG for approval;	The MOP was submitted and approved by RR as detailed in the audit findings against Schedule 3, Condition 40 above.	Compliant	
125	SCH3 C40c	This plan must: (c) be prepared in accordance with any relevant DRG guideline, and be consistent with the rehabilitation objectives in Table 12 and in the documents referred to in conditions 2 and 3 of Schedule 2;	Table 1-2 of the MOP states that it was prepared in accordance with the <i>DRE Guidelines ESG3: Mining Operations Plan (MOP) Guidelines. September 2013</i> . A detailed assessment of the MOP against the Guideline was not undertaken. The MOP makes reference to the rehabilitation objectives outlined in Table 12 of PA 08_0101.	Compliant	
126	SCH3 C40d	This plan must: (d) build, to the maximum extent practicable, on the Biodiversity Management Plan and the other management plans required under this approval; and	Multiple management plans work in sync together to establish and monitor the success of rehabilitation across site. The WMP, BMP, Extraction Plans as well as internal management plans and procedures such as the Weed and Pest Management Plan and Bushfire Management Plan link to the MOP.	Compliant	
127	SCH3 C40e	This plan must: (e) address all aspects of rehabilitation and mine closure, including final land use assessment, rehabilitation objectives, domain objectives, completion criteria and rehabilitation monitoring.	The MOP has been developed to address all aspects of rehabilitation and mine closure applicable to Integra UG. Post mining land use is outlined in Section 4 of the MOP and rehabilitation planning and management measures are outlined in Section 5.0.	Compliant	
EXPLORATION ACTIVITIES & SURFACE INFRASTRUCTURE					
128	SCH3 C41	Exploration Activities and Minor Surface Infrastructure Management Plan The Proponent must prepare an Exploration Activities and Minor Surface Infrastructure Management Plan for the project to the satisfaction of the Secretary. The Proponent must implement the approved management plan as approved from time to time by the Secretary.	<u>Exploration Activities and Minor Surface Infrastructure Management Plan Approval</u> The Integra UG Exploration Activities and Minor Surface Infrastructure Management Plan (EAMSIMP, Document No. INTUG-793190785-49, version 3.0, dated 10 September 2018) was initially approved by the Department on 28 March 2017 prior to recommencement of mining by Glencore. The plan was revised in 2018 in response to the approval of Modification of the sites project approval 08_0101. The Department approved the revised EAMSIMP on 10 September 2018. <u>Exploration Activities and Minor Surface Infrastructure Management Plan Implementation</u> The following activities occurred, or had the potential to occur, during the audit period and are covered within the EAMSIMP: - exploration activities - gas drainage works - ventilation works - construction activities - minor subsidence remediation works, if required - implementation of erosion and sedimentation controls associated with the above disturbance activities. Review of Controls Implemented The auditors reviewed the ground disturbance permit (GDP) process in order to verify the implementation of the key management measures outlined in the EAMSIMP. The auditor sighted completed GDPs for surface disturbance works associated with MOD 8. A number of incidents were recorded during the audit period which were the result of controls in GDPs not being followed. Refer the incident summary provided below for additional information.	Not Compliant LOW	Recommendation not required as, based on evidence reviewed, Integra UG's actions at the time of the audit are adequate to address the cause and prevent reoccurrences of this nature.

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			To assess the implementation of the EAMSIMP the auditors reviewed the plan's objectives and performance indicators to assess if they were being tracked and achieved. This included the following: • Surface disturbance activities will avoid impacts to threatened species: This was verified through the GDP process and validated by the E&C department through routine GDP inspections. Evidence of ecologists being employed to provide specialist oversight of ground disturbance works was observed. • Heritage items are identified and avoided during surface disturbance works: The GDP process requires a review of heritage items within the vicinity of ground disturbance works. The auditors sighted evidence of OzArk being engaged to be onsite during surface disturbance works to provide specialist input into the management of or identification of potential heritage items. • Clearing and disturbance of native vegetation is minimised: clearing of native vegetation is authorised and monitored via the GDP process. As detailed below under 'Incident Management', four instances of GDP controls not being complied with were recorded during the audit period. This included two incidents where ground disturbance occurred outside the permitted GDP boundary. The cause for these two incidents was concluded to be a miscommunication or misunderstanding of the GDP or delineation (flagging) of the GDP boundary not being used. Incidents of this nature are generally self-reported by the contractor conducting the work or identified by the Integra UGE&C department during routine GDP inspections. • Erosion and sedimentation is minimised: Where required, based on the work being conducted, an erosion and sediment control plan is developed. Erosion and sediment controls are reviewed by the E&C department during their GDP inspections. • Rehabilitation occurs once works are complete: The auditors sighted evidence of progressive rehabilitation of drill pads, access tracks and other areas previously disturbed by authorised surface disturbance works. Rehabilitation is conducted in accordance with the approved MOP. Complaints management The auditors reviewed the Integra UG Complaints register for the audit period. No complaints were received in relation to exploration activities or minor surface infrastructure. Incident Management A review of incidents recorded in Integra UG's internal database CMO during the audit period was conducted by the auditors. Four internal incidents were recorded which related to non-compliances with environmental management controls identified in relevant GDPs. It is noted that in all instances the disturbance occurred within the disturbance footprint of Integra UG but were outside the GDP boundary areas authorised by Integra UG's E&C department. It is also noted that a total of 72 GDPs were processed during the audit period. A summary of the incidents is provided below: • CMO Incident dated 21 March 2018: A surface drill pad had topsoil removed for entire pad, which equated to an area of 40m by 40m. The GDP authorised removal of topsoil from an area of only 10m by 10m. • CMO Incident dated 21 October 2019: An access track was cleared between the Glendell track to the area allocated for the power line construction under MOD 8. This access track was found to be outside the allocated GDP boundary and crossed over a section of grass that extended approximately 20m from Glendell access track to the GDP boundary. • CMO Incident dated 18 October 2019: An excavator relocating overburden rocks from the trenching works area to the stockpile area tracked outside of the GDP area to do so. • CMO Incident dated 15 February 2019: A felled tree was removed from an area located outside of the approved GDP area.		

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Summary While it has been found that the internal incidents resulted in vegetation clearing in excess of that approved under the authorised GDPs, the auditors note that Integra UG's GDP process is a well-established management measure which allows identification of risks to the environment and ensures impacts to areas outside the mine disturbance footprint are avoided. In assessing compliance with the implementation of the EAMSIMP the auditors must review the management measures outlined in the plan and validate if they are being effectively implemented during the audit period. A primary control to ensure compliance with the objectives of the plan is the implementation of Integra UG's GDP process. While these incidents are not deemed to be reportable incidents under the definition of an incident in the PA 08_0101, they show a minor lack of implementation of controls outlined in the EAMSIMP. Therefore, a non-compliance has been identified. The auditors note that following each incident actions were made to address the root cause of the incident. This included improving communication with contractors regarding the GDP process. It is noted that reporting of internal non-conformances is an essential method of ensuring continual improvement. Therefore, while these incidents should be avoided, it is important that non-conformances of this nature continue to be reported in Integra's internal incident management system. While a non-compliance has been identified the auditors believe, based on evidence reviewed, that Integra UGs actions are adequate at addressing the cause and preventing reoccurrences of this nature. Therefore, no recommendation has been applied for this non-compliance. Evidence: - Letter from the Department titled 'Integra UG Project Environmental Management Plans', dated 10 September 2018 - Letter from the Department titled, Integra UG Mine – Management Plans, dated 28 March 2017' - Letter from the Department titled 'Approval of Experts – Integra UG Coal Mine', dated 19 December 2016 - Letter from DRE Titled 'Integra UG EAMSIMP', dated 28 November 2016 - Letter from RR titled 'Integra UG EAMSIMP', dated 06 July 2018 - Interview with Integra UG E&C Coordinator - Integra UG Incident register (audit period) - Integra UG Complaints register (audit period) 2018 & 2019 Annual Reviews - Site Inspection - CMO E&C Surface Inspections - GDP CAA HSEC PER 004, GD-17-12-18-09-06, dated 18 December 2017 - GDP Inspection – Clearing of trees for powerline construction, dated 30 September 2019		
129	SCH3 C41a	This Plan must: (a) be prepared by suitably qualified and experienced persons whose appointment has been approved by the Secretary;	The Department endorsed the appointment of Nicole Armit, of EMM Consulting Pty Limited (EMM), to prepare the EAMSIMP on 19 December 2016.	Compliant	
130	SCH3 C41b	This Plan must: (b) be prepared in consultation with DRG;	The EAMSIMP was prepared in consultation with the former NSW Department of Industry – Resources and Energy (DRE), now known as the Resources Regulator (RR). A meeting was held by Integra UG representatives with the DRE on 27 October 2016 to discuss the plan and confirm DRE's expectations regarding content and implementation. Evidence verifying consultation with the RR is provided in Appendix B of the EAMSIMP.	Compliant	
131	SCH3 C41c	This Plan must: (c) be submitted to the Secretary for approval prior to carrying out exploration activities causing surface disturbance or constructing surface infrastructure, unless the Secretary agrees otherwise;	Exploration and gaswell drilling associated with recommencement of mining occurred in June 2017 prior to the audit period. The EAMSIMP was approved by the Department in March 2017 before commencement of these works. The revised EAMSIMP was approved by the Department in September 2018 prior to commencement of construction under MOD 8 which commenced in 2019.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
132	SCH3 C41d	This Plan must: (d) include a description of the measures that would be implemented for: - managing exploration activities; - managing construction and operation of minor surface infrastructure (including minewater drainage bores, service boreholes, gaswells and infrastructure corridors) and associated access tracks; - consulting with and compensating affected landowners; - avoiding threatened species, populations or their habitats and EECs; - minimising clearance and disturbance of native vegetation; - minimising erosion and sedimentation; - achieving applicable standards and goals; and - rehabilitating disturbed areas.	- The primary means of managing exploration activities is conducted through the GDP process. This is outlined in Section 3.1 of the EAMSIMP. - The primary means of managing construction of minor surface infrastructure is conducted through the GDP process. This is outlined in Section 3.1 of the EAMSIMP. - Community interaction, including the process to be followed should a landowner be affected by disturbance works, is outlined in Section 3.1.3 of the EAMSIMP. - Management measures to be considered prior to any disturbance works which aim to manage negative impacts to threatened species, populations or their habitats and EECs is outlined in Section 3.1.5 of the EAMSIMP. - Management measures in relation to clearing activities and stockpiling is outlined in Section 3.1.6 of the EAMSIMP. - Erosion and sediment control measures are outlined in Section 3.1.2 of the EAMSIMP - Measures to achieve applicable standards and goals is outlined throughout the plan and specifically in section 4.3 performance assessment. - It is noted that Table 1-1- of the EAMSIMP outlines the project approval conditions and where they addressed in the plan. The table states that rehabilitation of disturbed areas is covered in section 4.3 of the EAMSIMP however this section related to the objectives and performance indicators for the plan. Instead rehabilitation management is outlined in Section 4.2 of the EAMSIMP.	Compliant	IEA OFI 18: It is suggested that Table 1-1 be updated in the next revision of the plan to accurately reflect where rehabilitation management is covered in the plan.
TRAFFIC					
133	SCH3 C42	Construction Traffic Management Plan Prior to the commencement of construction activities under Modification 8, the Proponent must prepare a Construction Traffic Management Plan to the satisfaction of the Secretary. The Proponent must implement the approved Construction Traffic Management Plan as approved by the Secretary.	<u>Construction Traffic Management Plan Approval</u> The Integra UG Construction Traffic Management Plan (CTMP, Document No. INTUG-793190785-1294, version 1.0, dated 10 September 2018) was approved by the Department on 10 September 2018. Construction activities under Modification 8 commenced in 2019 after the approval of the CTMP. <u>Construction Traffic Management Plan Implementation</u> Construction traffic controls A Traffic Impact Assessment was conducted by Hansen Baily in 2017 as part of the environmental assessment for Modification 8. The traffic impact assessment stated that <i>construction traffic generated by Modification 8 will be temporary in nature and will not impact upon the performance of the adjacent road network and key intersections. No additional traffic is anticipated during operation, as the operational workforce will remain unchanged. The current operational workforce is already included in the background traffic on the road network. Mitigation measures suggested are to be implemented to remove or ameliorate any construction traffic related impacts.</i> It is noted that the CTMP includes reference and mitigation measures for construction of a new access road off Middle Fallbrook Road. This access road was not required to be constructed. Mitigation measures stated in the CTMP and in place during construction, as verified by inspection reports, record review, site interviews and photographic evidence, include the following: - Parking during construction was located at the main surface facilities area carpark. - Records of contractors assisting with the construction phase were retained, including start and finish times. - Access to construction areas was mainly via Glennies Creek Road, which was accessed using the New England Highway or Middle Fallbrook Road. - All staff and contractors were fully inducted through the GCAA Generic Surface Induction and Site Familiarisation course. Integra UG utilise a program called ‘Scenario’ which records all skills and competencies required for each person requiring to work at Integra. - The school bus timetable was obtained by Integra UG and was sighted by the auditors. - RMS approvals were obtained for all vehicles carrying oversize loads. - Contractors movements were tracked via the Damstra sign in/out terminals. - The Integra UG E&C department conduct a monthly inspection of the mine. This inspection included areas undergoing construction associated with MOD 8 during 2019. Findings and actions from the inspections are recorded in CM, a sample of which were sighted by the	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			auditors during the audit site visit. The auditors were informed that no construction traffic related issues were observed from the inspections. Complaints management The auditors reviewed the Integra UG complaints register for the audit period. No complaints were received in relation to construction traffic. Incident Management A review of incidents recorded in Integra UG's internal database CMO during the audit period was conducted by the auditors. No incidents were recorded in relation to construction traffic. Reporting A summary of construction traffic management was included in the 2019 Annual Review. Integra UG concluded that the construction traffic management measures set out in the CTMP were deemed effective during construction associated with MOD 8. Summary Based on the evidence reviewed the CTMP was considered to have been generally implemented at the time of the audit. Evidence: • Site familiarisation training PowerPoint, MOD 8 Vent Shaft 3 • Site Familiarisation Generic Induction, dated 25 October 2020 • Interview with Integra UG E&C Coordinator • Integra UG Incident register (audit period) • Integra UG Complaints register (audit period) • 2019 Annual Review • Site Inspection • CMO E&C Surface Inspections • GDP Inspection – Clearing of trees for powerline construction, dated 30 September 2019		
134	SCH3 C42a	This plan must: (a) be prepared in consultation with RMS and Council;	The CTMP was prepared in consultation with Roads and Maritime Services (RMS) and Singleton Shire Council (Council). A draft version of the CTMP was provided to RMS and Council, with an invitation to provide commentary on the document. Consultation records are provided in Appendix B of the CTMP. Evidence: • Email from Singleton Council 'Integra UGTCMP for comment', dated 26 July 2018 • Email from RMS 'Integra UG CTMP for comment', dated 11 August 2018 • CTMP	Compliant	
135	SCH3 C42b	This plan must: (b) include measures to minimise traffic impacts that may occur during construction of surface infrastructure and new access road	Section 3.1 of the CTMP outlined the construction traffic management measures to be implemented during construction associated with MOD 8 of the development. These include operation of designated transport routes, speed limits, signage and management of rail and school bus movements. Specific controls are listed in this section. Evidence: • CTMP	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
136	SCH3 C42c	This plan must: (c) outline measures to ensure construction vehicles utilise the safest route in regards to sight distances and existing road environment (i.e. speed, alignment and crash history) when entering and exiting the New England Highway from local roads; and	Section 3.1.3 of the CTMP requires all vehicles carrying oversize loads to comply with RMS requirements. In addition, Section 3.1.2 states that all staff and contractors working at Integra UG are to be fully inducted through the GCAA Generic Surface Induction and the Site Familiarisation (Section 3.2 of the CTMP). The CTMP also states that those assisting with the construction activities will be provided additional details relating to the road use and access requirements for the construction phase of the project. Section 3.1.4 outlines the requirements for speed limits making reference to ensuring compliance with NSW road rules. Evidence: CTMP	Compliant	
137	SCH3 C42d	This plan must: (d) include a program to monitor and report on the effectiveness of these measures.	Section 4.1 of the CTMP outlines the construction traffic monitoring to be conducted. This includes retaining records of contractors start and finish times, conducting monthly inspections by the E&C department and reporting of issues by the construction project manager to the E&C department. Section 5.1 of the CTMP outlines that the construction traffic monitoring will be reported annually in the site's Annual Reviews. Evidence: CTMP	Compliant	

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

138	SCH4 C1	By the end of December 2010, the Proponent must: (a) notify in writing the owners of: - the land listed in Table 1 of Schedule 3 that they have the right to require the Proponent to acquire their land at certain stages during the project; - any residence on the land listed in Table 1, for which the acquisition basis is noise, or Table 6 of Schedule 3 that they are entitled to ask for additional noise mitigation to be installed at their residence at certain stages during the project; - any residence on the land listed in Table 1 of Schedule 3, for which the acquisition basis is air quality, that they are entitled to ask for additional air quality mitigation measures to be installed at their residence at certain stages of the project; and - any privately-owned land within 2 kilometres of any approved open cut mining pit on site that they are entitled to ask for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated; and (b) send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the underground project EAs identify that the dust emissions from the project are likely to be greater than the relevant air quality criteria in Schedule 3 at any time during the life of the project.	This condition was closed out prior to the commencement of the audit period.	Not Triggered	
139	SCH4 C2	Prior to entering into any tenancy agreement for any land owned by the Proponent that is predicted to experience exceedances of the relevant noise criteria or dust criteria in Schedule 3, the Proponent must: (a) advise the prospective tenants of the potential health and amenity impacts associated with living on the land and give them a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time); and	This had not occurred during the audit period.	Not Triggered	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		(b) advise the prospective tenants of the rights they would have under this approval, to the satisfaction of the Secretary.			
140	SCH4 C3	As soon as practicable after obtaining monitoring results showing: (a) an exceedance of any relevant criteria in Schedule 3, the Proponent must notify the affected landowner and/or tenants in writing of the exceedance, and provide regular monitoring results to each of these parties until the project is again complying with the relevant criteria; (b) an exceedance of any relevant criteria in conditions 6(c) or 7 of Schedule 3, the Proponent must notify the applicable owner in writing that they are entitled to ask for additional noise mitigation to be installed at their residence; and (c) an exceedance of any relevant criteria in condition 12 of Schedule 3, the Proponent must send a copy of the NSW Health fact sheet entitled “Mine Dust and You” (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).	This had not occurred during the audit period.	Not Triggered	
INDEPENDENT REVIEW					
141	SCH4 C4	If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impact of the project on his/her land. If the Secretary is not satisfied that an independent review is warranted, the Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 60 days of the request for a review. If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary’s decision the Proponent must: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 3; and • if the project is not complying with these criteria then: – determine if more than one mine is responsible for the exceedance, and if so the relative share of each mine towards the impact on the land; – identify the measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review.	This had not occurred during the audit period.	Not Triggered	
142	SCH4 C5	If the independent review determines that the project is complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Secretary. If the independent review determines that the project is not complying with the relevant criteria in Schedule 3, and that the project is primarily responsible for this non-compliance, then the Proponent must: (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until there is compliance with the relevant criteria; or (b) secure a written agreement with the landowner to allow the exceedances of the relevant criteria, to the satisfaction of the Secretary. If the independent review determines that the project is not complying with the relevant acquisition criteria in Schedule 3, and that the project is primarily responsible for this non-compliance, then upon receiving a written request from	This had not occurred during the audit period.	Not Triggered	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		the landowner, the Proponent must acquire all or part of the landowner's land in accordance with the procedures in conditions 7 and 8 below.			
143	SCH4 C6	If the independent review determines that the relevant criteria in Schedule 3 are being exceeded, but that more than one mine is responsible for this exceedance, then together with the relevant mine/s the Proponent must: (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until there is compliance with the relevant criteria; or (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Secretary. If the independent review determines that relevant acquisition criteria in Schedule 3 are being exceeded, but that more than one mine is responsible for the exceedance, then upon receiving a written request from the landowner, the Proponent must acquire all or part of the landowner's land on as equitable a basis as possible with the relevant mine/s in accordance with the procedures in conditions 7 and 8 below.	This had not occurred during the audit period.	Not Triggered	
LAND ACQUISITION					
144	SCH4 C7	Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent must make a binding written offer to the landowner based on: (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the project, having regard to the: - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and - presence of improvements on the land and/or any approved building or structure which has been physically commenced on the land at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of any additional mitigation measures required under conditions 6 or 7 of Schedule 3; (b) the reasonable costs associated with: - relocating within the Singleton or Muswellbrook local government areas, or to any other local government area determined by the Secretary; and - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and (c) reasonable compensation for any disturbance caused by the land acquisition process. However, if at the end of this period, the Proponent and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Secretary for resolution. Upon receiving such a request, the Secretary will request the President of the NSW Division of the Australian Property Institute (the API) to appoint a qualified independent valuer to: - consider submissions from both parties; - determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above; - prepare a detailed report setting out the reasons for any determination; and - provide a copy of the report to both parties.	Integra UG received one written request for acquisition from the landowners located at Residential Received No. 47, as detailed in Table 1. of PA 08_0101. The auditors sighted the following evidence with regards to this acquisition request: - On 01 November 2019 Integra UG received a request to commence the land acquisition process for Residential Receiver No. 47. - On 03 December 2019 Integra UG replied to the landowner with an offer of acquisition. - On 14 December 2019 the landowner accepted the acquisition price proposed. The written offer from Integra UG to the landowner makes reference to the offer being based on the current market value, relocation costs and reasonable compensation. Evidence: - Email from landowner to Integra UG seeking acquisition, dated 01 November 2019 - Letter from Integra UG to landowner dated 03 December 2019 (limited consent sighted due to confidentiality)	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		Within 14 days of receiving the independent valuer's report, the Proponent must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination. However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report disputing the independent valuer's determination, and any other relevant submissions. Within 14 days of this determination, the Proponent must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary's determination. If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Secretary determines otherwise.			
145	SCH4 C8	The Proponent must pay all reasonable costs associated with the land acquisition process described above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.	Compensation of reasonable costs was covered by Integra UG; no council approvals or subdivisions were required.	Compliant	

SCHEDULE 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

146	SCH5 C1	If the Secretary requires, the Proponent must prepare an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must: (a) be submitted to the Secretary for approval; (b) provide the strategic framework for the environmental management of the project; (c) identify the statutory approvals that apply to the project; (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project; (e) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the project; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise during the course of the project; • respond to any non-compliance; and • respond to emergencies; and (f) include: • copies of any strategies, plans and programs approved under the conditions of this approval; and • a clear plan depicting all the monitoring required to be carried out under the conditions of this approval. The Proponent must implement the approved strategy as approved from time to time by the Secretary.	The Integra UG Environmental Management Strategy (EMS) was initially approved by the Department on 19 December 2017. The EMS was subsequently reviewed and updated following approval of Modification 8 of PA 08_0101 and resubmitted for approval by the Department on 07 September 2018. The Department approved the revised EMS on 10 September 2018. (a) The EMS was reviewed and updated following approval of Modification 8 of PA 08_0101 and resubmitted for approval by the Department on 07 September 2018. The Department approved the revised EMS on 10 September 2018. (b) Section 1.2 of the EMS addresses this requirement (c) Section 3.5 of the EMS addresses this requirement (d) Section 4.1 of the EMS addresses this requirement (e) External communication measures which aim to keep regulatory agencies and the community informed on mining progress are outlined in Section 4.5.2 of the EMS. Complaints management is outlined in Section 4.5.3 of the EMS. Dispute resolution is outlined in Section 4.5.4 of the EMS, responses to non-compliances are outlined in Section 5 and Section 6.4 and emergency preparedness and response is outlined in Section 4.4.2. (f) Environmental management plans required under the approval are summarised in Section 3.6 of the EMS. Section 6.1 summarises the approved environmental monitoring programs and Figure 3 of the EMS shows the mines environmental monitoring locations. <u>Implementation Review of Environmental Management Strategy</u> Compliance Monitoring Integra UG implements and monitors compliance with key obligations outlined in the Integra UG management plans, strategies and programs as well as statutory requirements from approvals, licences and leases in the system CMO. Each obligation has been entered into CMO. CMO allows the obligations to be tracked and assigned to relevant personnel. It also allows evidence to	Compliant	
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Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			demonstrate how the obligation is met to be discussed and attached. The auditors observed the use of CMO during the audit as it was one of the main tools used by Integra UG to access documents to demonstrate compliance with the Development Consent, EPL, Mining Leases and implementation of management plans. The auditors identified that the required environmental monitoring plans and programs were being implemented during the audit period. This is discussed in more detail under the condition related to each management / monitoring plan. Integra UG conducts internal monitoring of the operation's environmental performance in accordance with the internal standard for internal and external audits. The auditors verified the following was occurring: - Internal compliance audits conducted by Glencore Corporate prior to each IEA. - Internal compliance audits conducted by the Integra UG E&C team. - Monthly inspections conducted by the E&C department Consultation Integra UG is required to track all external consultation in the Glencore corporate tool – Consultation Manager. Various external consultation methods were being implemented on site by Integra UG during the audit period. These included - Biannual CCC meetings - Monthly newsletter - Consultation with stakeholders during management plan development and review, including regulatory agencies, Registered Aboriginal Parties (RAPs) and Community members. - Operation of community enquiries line - Ad-hoc communication with the E&C department as required. Complaints No environmental-related complaints were received during the audit period. One complaint in total was recorded during the audit period. The complaint was in relation to a vehicle impacting a landowners fence. It was not known if the vehicle was being driven by an Integra UG employee or contractor however, in good faith, Integra UG paid for repair of the landowner's fence. Non-Compliances No non-compliances or reportable incidents were reported by Integra UG during the audit period. Cumulative Impact Management Integra UG consider cumulative impacts of the operation and the development of management controls to minimise these impacts in the following ways: - Environmental monitoring data is shared with MOC - Inter-mine meetings are held between MOC, Rix's Creek Mine and Integra UG - Environmental management programs are conducted in conjunction with neighbouring mining operations. For example, noise and air quality monitoring, rehabilitation monitoring as well as subsidence monitoring. Integra UG also utilise the MOC meteorological station. Emergency Response The site operates under an Emergency Management Plan. This management plan includes the requirements of the Integra UG Pollution Incident Response Management Plan (PIRMP). Summary		

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Based on the evidence reviewed, it was considered that in general the EMS was being implemented by Integra UG. Evidence: - Letter from the Department titled 'Integra UG Project, Environmental Management Plans, dated 10 September 2018 - CMO Review - Discussion with E&C Coordinator - Monthly E&C Inspections - Integra PIRMP - Integra UG Complaints Register (audit period) - Integra UG Incident register (audit period)		
147	SCH5 C1A	Adaptive Management The Proponent must assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity: (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur; (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and (c) implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.	Based on a review of compliance monitoring as required by PA 08_0101, undertaken by Integra UG during the audit period, there have been no exceedances of the criteria and /or performance measures outlined in Schedule 3 of PA 08_0101. This finding is based on the detailed review and evidence referenced against each relevant condition in Schedule 3 of this checklist.	Compliant	
148	SCH5 C2	Management Plan Requirements The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data; (b) a description of: - 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; (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; (d) a program to monitor and report on the: - impacts and environmental performance of the project; and - effectiveness of any management measures (see (c) above); (e) a contingency plan to manage any unpredicted impacts and their consequences; (f) a program to investigate and implement ways to improve the environmental performance of the project over time; (g) a program to regularly review management practices to align with contemporary best practice industry standards;	A review of Integra UG's management plans was undertaken by the auditors. The auditors found that the management plans for Integra UG generally follow the same format and include these requirements. Refer to adequacy review of management plans within the main report.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		(h) a protocol for managing and reporting any: - 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 (i) a protocol for periodic review of the plan. <i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i>			
149	SCH5 C3	Preparation of Management Plans Prior to approval of management plans required under Schedule 3, all existing management plans, monitoring programs, strategies, programs, protocols, etc approved as at the date of approval of Modification 5 shall continue to have full force and effect, and may be revised under the requirements of condition 6 below as if subject to the conditions of this approval that applied prior to the approval of Modification 5, or otherwise with the approval of the Secretary.	All management plans required under Schedule 3 were approved by the Department prior to the audit period commencing.	Not Triggered	
150	SCH5 C4	Relationship between Management Plans With the agreement of the Secretary, the Proponent may combine any strategy, plan or program required by this approval with any similar strategy, plan or program required for the Mount Owen Complex.	This had not occurred during the audit period.	Not Triggered	
151	SCH5 C5	Relationship between Management Plans The Water, Biodiversity and Heritage Management Plans required by conditions 31, 32 and 33 of Schedule 3, respectively, are to be prepared in respect of all parts of the project that are not covered by an approved Extraction Plan under condition 20 of Schedule 3. In particular, the Water, Biodiversity and Heritage Management Plans should address all areas subject to existing or proposed surface disturbance associated with the project.	The Water, Biodiversity and Heritage Management Plans are site-wide documents that address all areas subject to existing or proposed surface disturbance associated with the project.	Compliant	
152	SCH5 C6	Revision of Strategies, Plans & Programs Within 3 months of: (a) the submission of an incident report under condition 9 below (b) the submission of an annual review under condition 11 below; (c) the submission of an audit report under condition 12 below, or (d) approval of a modification to this consent, The Proponent must review and if necessary revise, the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Within 4 weeks of conducting any such review, the Proponent must advise the Secretary of the outcomes of the review, and provide any documents that have been revised to the Secretary for review and approval. <i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and to incorporate any recommended measures to improve the environmental performance of the development.</i>	The following events triggered a review of the strategies, plans and programs required under PA 08_0101: - Submission of the 2017, 2018 and 2019 Annual Reviews - Submission of the 2017 IEA in 2018 - Approval of Modification 8 to PA 08_0101. The 2017 IEA was submitted to the Department on 17 February 2018. The Annual Reviews for 2017, 2018 and 2019 were submitted on 29 March 2018, 29 March 2019 and 31 March 2020 respectively. All management plans were revised and submitted for approval to the Department following the approval of modification 8 of PA 08_0101. Approval from the Department for each plan has been documented against each management plans condition in this checklist. The auditors sighted evidence of Integra UG summarising the reviews conducted following the submission of the 2017 IEA, the Annual Reviews and the approval of Modification 8. Integra UG notifies the Department which management plans were updated as a result of the reviews conducted. Evidence: - Letter to the Department, titled 'Integra UG Environmental Management Plan Reviews', dated 21 June 2018 - Letter to the Department, titled 'Integra UG Environmental Management Plan Reviews', dated 28 June 2019 - Letter to the Department, titled 'Integra UG Environmental Management Plan Reviews', dated 30 June 2020	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
153	SCH5 C7	Updating & Staging Submissions of Strategies, Plans or Programs To ensure the strategies, plans or programs under this approval are updated on a regular basis, and that they incorporate any appropriate mitigation measures to improve the environmental performance of the project, the Proponent may at any time submit revised strategies, plans or programs to the Secretary for approval. With the agreement of the Secretary, the Proponent may also submit any strategy, plan or program required by this approval on a staged basis. With the agreement of the Secretary, the Proponent may revise any strategy, plan or program approved under this approval without consulting with all the parties nominated under the applicable conditions of approval. <i>Notes:</i> • While any strategy, plan or program may be submitted on a progressive basis, the Proponent must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and • If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.	2017, 2018 & 2019 Annual Reviews Updates were made, outside of revisions made under schedule 5, condition 6, to the following plans which were submitted to the Department for approval: - Water Management Plan: Updated to reflect the Water Sharing Agreement with Rix's Creek Mine. - Air Quality and Greenhouse Gas Management Plan: Updated to include the cumulative response protocol and location of TSP2. - Biodiversity Management Plan: Updated following regulator comments on the LW15-16 Extraction Plan - Noise Management Plan: Updated to include attended noise monitoring for construction activities and cumulative noise management. Evidence of approval of these plans is referenced against the relevant condition for each management plan in this checklist.	Compliant	
154	SCH5 C8	Community Consultative Committee The Proponent must operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Department's Community Consultative Committee Guidelines State Significant Projects November 2016, or its latest version. <i>Notes:</i> • The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval; • In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community; • The Proponent may, with the approval of the Secretary, combine the function of this CCC with the function of other CCCs in the area.	Integra UG utilise the established MOC Community Consultative Committee (CCC) which meets twice a year to satisfy the requirements of Schedule 5, Condition 8 of PA 08_0101. Minutes from the CCC meetings held during the audit period were reviewed by the auditors and are available on the Integra UG public website. A summary of the CCC meetings for the year is provided in the Annual Review. Evidence: - CCC Meeting Minutes - Annual Review 2017, 2018 & 2019	Compliant	
REPORTING					
155	SCH5 C9	Incident Reporting The Proponent must notify the Secretary and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent must provide the Secretary and any relevant agencies with a detailed report on the incident.	An incident is defined by the project approval 08_0101 as <i>a set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval.</i> The auditors conducted a search of the EPA's Public Register for EPL 3390. No enforceable undertakings or penalty notices were issued during the audit period. The auditors reviewed the site's incident database, external consultant's investigation reports as well as results presented in the Annual Reviews during the audit period. No reportable incidents occurred during the audit period which required reporting under schedule 5, condition 9. It is noted that Integra UG did report one incident to the Department in relation to deposited dust samples being not collected within the required timeframe. This incident was reported as a precaution but did not constitute an incident as defined by the project approval 08_0101. Evidence: - EPA Public Register - Integra UG incident database (audit period) 2017, 2018 & 2019 Annual Reviews	Not Triggered	
156	SCH5 C10	Regular Reporting The Proponent must provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any approved plans or programs of the conditions of this approval.	Adequate reporting on the site's environmental performance is made available on the Integra UG public website. Refer to evidence against schedule 5, condition 14. Evidence: Integra UG public website https://www.glencore.com.au/operations-and-projects/coal/current-operations/integra-underground	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
157	SCH5 C11	Annual Review By the end of March each year, or other timing as may be agreed by the Secretary, the Proponent must submit a report to the Department reviewing the environmental performance of the project to the satisfaction of the Secretary. This review must: (a) describe the works (including any rehabilitation) that were carried out during the previous calendar year, and the works that are proposed to be carried out over the current calendar year; (b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against the: • relevant statutory requirements, limits or performance measures/criteria; • monitoring results of previous years; and • relevant predictions in the documents referred to in condition 2 of Schedule 2; (c) identify any non-compliance over the previous calendar year, and describe what actions were (or are being) taken to ensure compliance; (d) identify any trends in the monitoring data over the life of the project; (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and describe what measure will be implemented over the current calendar year to improve the environmental performance of the project.	The auditors reviewed the 2017, 2018 and 2019 Annual Reviews which were submitted to the Department during the audit period. The following was identified: 2019 Annual Review • Integra UG submitted the 2019 Annual Review to the Department on 31 March 2020 • The Department responded on 15 May 2020 requesting additional information to be provided by the 05 June 2020. • Integra UG re-submitted the 2019 Annual Review on 05 June 2020 • The Department approved the revised annual review on 10 June 2020 2018 Annual Review • Integra UG submitted the 2018 Annual Review to the Department on 29 March 2019 • The Department responded on 01 July 2019 requesting additional information be provided by 30 July 2019 • Integra UG re-submitted the 2018 IEA to the Department on 30 July 2019 • The Department approved the revised 2018 Annual Review on 15 August 2019 2017 Annual Review • Integra UG submitted the 2017 Annual Review to the Department on 29 March 2018 • The Department responded on 03 May 2018 requested additional information be provided by 01 June 2018 • Integra UG re-submitted the revised 2017 Annual Review on 01 June 2018 • The Department approved the revised 2017 Annual Review on 28 August 2018 The 2017, 2018 and 2019 Annual Reviews contained the required information as outlined in Schedule 5, Condition 11. Evidence: • Annual Review submission letters as detailed above. • Department correspondence and approval letters as detailed above. • 2017, 2018 & 2019 Annual Reviews		
INDEPENDENT ENVIRONMENTAL AUDIT					
158	SCH5 C12	By the end of December 2011, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission, commence and pay the full cost of an Independent Environmental Audit of the project. This audit must: (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies; (c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals); (d) review the adequacy of any approved strategies, plans or programs required under these approvals, with particular reference to management practices to ensure that they align with contemporary best practice industry standards; (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and (f) be conducted and reported to the satisfaction of the Secretary. Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.	The 2017 IEA was conducted by WSP. The audit period was 05 December 2014 to 28 November 2017. This report forms part of the 2020 IEA which covers the audit period 29 November 2017 – 03 December 2020. (a) The 2020 IEA audit team was endorsed by the Department on 06 October 2020. The 2017 IEA audit team was endorsed by the Department on 01 December 2017. (b) Consultation conducted during the 2020 IEA is documented in the IEA report. Consultation with relevant regulatory agencies during the 2017 IEA was documented in Section 5.4 of the 2017 IEA report. (c) the audit checklists provided in the 2020 IEA report and the 2017 IEA report assess the environmental performance of the project, with summaries provided in the main IEA report documents. (d) The adequacy of the mines management plans, programs and strategies is outlined in the main document of the 2017 and 2020 IEA reports. (e) recommendations for improvement are outlined in the main document of the 2017 and 2020 IEA reports. (f) The 2017 IEA was submitted to the Department on 19 February 2018. The Department accepted the submission of the 2017 IEA on 27 August 2018.	Compliant	

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Evidence: - Letter from the Department titled 'Integra UG Proposed independent Environmental Audit Team', dated 06 October 2020 - Letter from the Department titled 'Integra UG Endorsement of Independent Environmental Audit Team Specialists', dated 01 December 2017 - Letter from Integra UG to the Department titled 'Project Approval 08_0101 – independent environmental audit, dated 19 February 2018 - Letter from the Department, titled Integra UG IEA, dated 27 August 2018.		
159	SCH5 C13	Within 12 weeks of commencing each audit, or as otherwise agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of any measures proposed to address the recommendations.	The 2017 IEA was required to be submitted to the Department no later than 20 February 2018. The 2017 IEA report and Integra UG's response to recommendations were submitted to the Department on 19 February 2018. Evidence: Letter from Integra UG the Department titled 'Project Approval 08_0101 – independent environmental audit, dated 19 February 2018	Compliant	
ACCESS TO INFORMATION					
160	SCH5 C14	The Proponent must: (a) make copies of the following publicly available on its website: - the documents referred to in conditions 2 and 3 of Schedule 2; - all current statutory approvals for the project; - all approved strategies, plans and programs required under the conditions of this approval; - the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans or programs; - a complaints register, which is to be updated on a monthly basis; - minutes of CCC meetings; - the annual reviews over the life of the project; - any independent environmental audit, and the Proponent's response to the recommendations in any audit; and - any other matter required by the Secretary; (b) keep this information up-to-date, to the satisfaction of the Secretary.	The Integra UG public website (https://www.glencore.com.au/operations-and-projects/coal/current-operations/integra-underground/approvals-documents) was reviewed by the auditors. The following was made available at the time of the audit: - MOD 8 EA - Links to EAs for Modifications 1 – 7 available on the Department's major projects portal. - Management plans required by the project approval and pollution incident response management plan - The underground mine's original EA - Previous EIS documents for Glennies Creek Colliery - Link to the Project Approval 08_0101 - Link to the sites EPL 3390 - Coal and Mining Leases - Monitoring results for the following: - Aboriginal cultural heritage monitoring - Water and effluent monitoring - Noise monitoring - Air quality and meteorological monitoring - Bettys Creek monitoring - Community Complaints Register - CCC meeting minutes and community newsletters - Annual Reviews dating back to 2006 - The 2014 and 2017 IEA reports and Integra UG's responses to the recommendations in the audits. Evidence: - Integra UG public website	Compliant	

STATEMENT OF COMMITMENTS

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation	
	STATUTORY REQUIREMENTS					
00161	Compliance with all conditional requirements in all approvals, licences and leases.	The development will be carried out as outlined in the following: • this Environmental Assessment Report (EA); • Project Approval; • Environment Protection Licence; • Subsidence Management Plans (SMPs); • Mining Lease(s); and • any other approvals, licences or leases. Continuous and as required	The auditors and specialists conducted a review of incident occurrences at the mine during the audit period, complaints received, as well as a review of the general environmental performance of the site in relation to Integra UG’s various environmental management plans. Other than where issues have been identified, Integra UG is considered to be carrying out operations in general accordance with the documents listed in this condition.	Compliant		
00162	All operations conducted in accordance with all relevant documentation.	Undertake all activities in accordance with the accepted Mining Operations Plan; environmental procedures; safety management plan and/or site-specific documentation in force at that time. Continuous and as required	Other than where issues have been identified, Integra UG is considered to be carrying out operations in general accordance with the documents listed in this condition.	Compliant		
	STAKEHOLDER CONSULTATION					
00163	That effective communication/consultation is undertaken throughout the life of the Project	Preparation of a community newsletter following Project Approval. Within three months from the date of Project Approval.	The Project Approval was originally approved in 2010. This condition was closed outside of the audit period.	Not Triggered		
00164		Biannual meetings of the Community Consultative Committee. Continuous and as required.	Refer to evidence against Schedule 5, Condition 8.	Compliant		
00165		Ongoing communication with the management of Glencore and provision of subsidence monitoring data Continuous and as required.	Both Integra UG and Mount Owen Mine are owned and operated by Glencore. Routine communication is held between MOC and Integra with regards to subsidence impacts and mining progress, as detailed against Schedule 3, Condition 20.	Compliant		
00166		Conduct a more detailed assessment of the potential impacts of subsidence on items of Glencore infrastructure Prior to longwall mining under areas containing Glencore owned infrastructure.	A detailed subsidence impact assessment was prepared as part of the Environmental Assessment for Modification 8 of PA 08_0101. Following approval of Modification 8 an extraction plan was developed for the mining of Longwalls 15 and 16 which includes detailed mitigation measures relating to MOC infrastructure. Refer to evidence against Schedule 3, Condition 20.	Compliant		
		SUBSIDENCE				
00167		Subsidence Management	Subsidence Management Plan applications will be submitted to DRG detailing strategies to manage subsidence impacts, inclusive of measures referenced in this EA. Prior to the commencement of proposed longwall mining in the affected area.	Following approval of Modification 8 in 2017 an extraction plan was developed for the mining of Longwalls 15 and 16. Refer to evidence against Schedule 3, Condition 20.	Compliant	
00168	The mine plan for the Barrett seam longwall blocks will be developed and operated to provide a minimum 40 metre		Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered		

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
		separation between the boundary to the connected alluvium and the 20mm subsidence line.			
		Prior to the commencement of longwall mining in the affected area and ongoing.			
00169		In addition to the overarching SMPs, specific management plans will be developed which will address potential subsidence impacts on specific items or areas of sensitivity, roads and associated infrastructure, transmission lines, communication infrastructure, Bettys Creek, farm fences, farm buildings and farm dams.	Following approval of Modification 8 in 2017 an extraction plan was developed for the mining of Longwalls 15 and 16 which includes the following: - Coal Resource Recovery Plan - Subsidence Monitoring Program - Public Safety Management Plan - Land Management Plan - Built Features Management Plan, inclusive of: - Mount Owen Railway and Bettys Creek Bridges Asset Management Plan; - Mount Owen Mine Key Features - Asset Management Plan - Subsidence Management Protocol Refer to evidence against Schedule 3, Condition 20.	Compliant	
00170		Subsidence monitoring involving cross lines, longitudinal lines and three dimensional surveying will be undertaken to confirm the levels of subsidence occurring and enable refinements to subsidence predictions.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
		Prior to, during and after mining in the Barrett and Hebden Seams.			
00171		Temporary remediation works will progress during mining, with permanent remediation works completed following full subsidence impacts in an area.	Review of subsidence monitoring data recorded during the audit period indicated that no significant subsidence impacts were identified during the audit period.	Complaint	
		Continuous and as required.	Integra UG informed the auditors that one small surface crack was identified during visual inspections which was remediated. The crack was not identified for inspection during the audit period.		
			Rehabilitation of mine affected areas will be conducted in accordance with the approved MOP.		
00172	Management of subsidence impacts on surface infrastructure	The new Forest Road Subsidence Management Plan to be built upon the existing management plan to reflect the expected subsidence and associated impacts.	Mining during the audit period occurred in the Middle Liddell Seam only. This requirement is related to mining in the Hebden seam. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
		Prior to the commencement of proposed longwall mining in the affected area.			
00173		As part of Hebden SMP development, a management plan for Glennies Creek Road and associated infrastructure will be prepared.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
		Prior to the commencement of proposed longwall mining in the affected area.			
00174		As part of Barrett SMP development, a management plan for Middle Falbrook Road and associated infrastructure will be prepared.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
		Prior to the commencement of proposed longwall mining in the affected area.			

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
00175		Possum Skin Dam will be decommissioned Prior to the commencement of longwall mining which would potentially affect the stability or integrity of the dam wall.	The auditors were informed that Possum Skin Dam is managed by Bloomfield as part of the Rix's Creek Open Cut Mine. This was previously the Integra Open Cut Mine.	Not Triggered	
00176		The current Electricity Transmission Lines Subsidence Management Plan will be revised for inclusion in the new SMPs and will detail management of subsidence effects on powerlines. Prior to the commencement of proposed longwall mining in the affected area.	This requirement was not required at the time of the audit. The IUG Longwall 15-16 Extraction Plan and associated sub plans manages subsidence impacts associated with mining of Longwalls 15 and 16. The IUG Longwall 13-14 Extraction Plan and associated sub plans manages subsidence impacts associated with mining of Longwalls 13 and 14.	Not Triggered	
00177		The existing management plan for the Forest Road communications/Telstra line will be reviewed and updated in consultation with Telstra to reflect changes resulting from this proposal. Prior to the commencement of proposed longwall mining in the affected area.	This requirement was not required at the time of the audit. The IUG Longwall 15-16 Extraction Plan and associated sub plans manages subsidence impacts associated with mining of Longwalls 15 and 16. The IUG Longwall 13-14 Extraction Plan and associated sub plans manages subsidence impacts associated with mining of Longwalls 13 and 14.	Not Triggered	
00178		Stakeholder consultation and monitoring of the existing communication cable adjacent to the Mt Owen Rail Spur will be carried out to ensure the cable remains serviceable during subsidence. As required	Both Integra UG and Mount Owen Mine are owned and operated by Glencore. Routine communication is held between MOC and Integra with regards to subsidence impacts and mining progress, as detailed against Schedule 3, Condition 20.	Compliant	
00179		Should GMO's mine plan change, any potential subsidence effects on its tailings dams or highwalls will be addressed in the relevant SMPs at that time. Prior to the commencement of proposed longwall mining in the affected area.	The IUG Longwall 15-16 Extraction Plan and associated sub plans manages subsidence impacts associated with mining of Longwalls 15 and 16. The IUG Longwall 13-14 Extraction Plan and associated sub plans manages subsidence impacts associated with mining of Longwalls 13 and 14.	Compliant	
00180		HV Coking Coal will undertake a more detailed assessment of potential impacts on the Ravensworth East / GMO and Glendell Open Cuts. Following finalisation of the surface mine layout and prior to mining within these areas.	A detailed subsidence impact assessment was prepared as part of the Environmental Assessment for Modification 8 of PA 08_0101. Following approval of Modification 8 an extraction plan was developed for the mining of Longwalls 15 and 16 which includes detailed mitigation measures relating to MOC infrastructure. Refer to evidence against Schedule 3, Condition 20.	Compliant	
00181		HV Coking Coal will provide stakeholders such as Singleton Shire Council and landowners who border roads with a monthly update of the location of the longwall face relative to the road, and the estimated progress of the longwall during the following month. Monthly	This commitment relates to mining conducted prior to the commencement of the audit period and prior to Glencore taking ownership of the mine. Mining conducted during the audit period in Longwalls 13 to 16 was not conducted under the publicly accessible section of Forrest road which terminates at the northern edge of Longwall 11.	Not Triggered	
00182		Signs will be erected by HV Coking Coal at points on the road at the edge of the longwall subsidence impact zone. Prior to the commencement of proposed longwall mining in the affected area	During the audit site inspection signage which notifies to the subsidence impact zone was sighted. Subsidence signage is also verified during subsidence surface inspections conducted by the Integra E&C department.	Compliant	

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
00183	Ensure minimal subsidence impacts on natural features	Approval will be sought from DRG and ARTC prior to any mining within the Main Northern Railway protection zone. Prior to mining within the protection zone	Mining was not conducted in this area during the audit period. As such, this condition was not triggered.	Not Triggered	
00184		Any proposed workings in the Main Northern Railway protection zone will be designed to be long term stable – taking site conditions into consideration. Prior to mining within the protection zone	Mining was not conducted in this area during the audit period. As such, this condition was not triggered.	Not Triggered	
00185		A subsidence management plan will be devised in consultation with the SANSW and the owners of houses above Barrett Seam Longwall 7. Prior to the commencement of proposed longwall mining in the affected area.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
00186		Surveys will be conducted prior to, during and after mining, to confirm the levels of subsidence movements and impacts, and identify if triggers for implementation of management measures have been reached. Prior to the commencement of proposed longwall mining in the affected area.	Refer to evidence against Schedule3, Condition 17.	Compliant	
00187		HV Coking Coal and the SANSW will undertake rebuilding, rectification of structural work, re-levelling and remedial work to surface water drainage and sewerage systems at the existing Glennies Creek Community Hall as required to remediate anticipated subsidence damage. As required	This was not required during the audit period. Refer to evidence against Schedule3, Condition 17.	Not Triggered	
00188	Ensure minimal subsidence impacts on natural features	The Hebden SMPs to be developed will incorporate and build upon the existing Surface Drainage Management Plan. Prior to the commencement of proposed longwall mining in the affected area.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
00189		A Bettys Creek Diversion Management Plan will be prepared as part of the Hebden SMPs. Prior to the commencement of proposed longwall mining in the affected area.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
00190		HV Coking Coal will prepare: • a response strategy to address any destabilisation of Main Creek; • a works programming for any necessary remedial works in Main Creek should subsidence expression initiate incision and headward erosion; • an outline of expansion of piezometric monitoring; and • a TARP as part of a surface water and groundwater monitoring and management program.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
		Prior to Hebden Seam longwall mining undermining Man Creek.			
00191	Ensure minimal subsidence impacts on farm infrastructure.	The Hebden SMPs and Barrett SMPs to be developed will incorporate and build upon the existing Farm Fences, Farm Buildings and Farm Dams Subsidence Management Plans, as appropriate.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
		Prior to the commencement of proposed longwall mining in the affected area.			
00192		In consultation with the relevant landowner, HV Coking Coal will remediate any dam that is damaged by subsidence (or has its storage capacity reduced by more than 10 percent) to a condition similar to that prior to subsidence	This was not required during the audit period. Refer to evidence against Schedule3, Condition 17.	Not Triggered	
	As required.				
	ECOLOGY				
00193	Operations are managed such that adverse impacts to native flora and fauna are prevented, minimised and/or offset.	HV Coking Coal will implement the following flora and fauna management procedures. •Revegetate the planned Bettys Creek diversion channel and adjacent areas; •Undertake surveys along the creek diversion and revegetated areas to record any significant loss of planted seedlings and monitor the use of revegetated areas by native fauna. •Revegetation design, weed management, exclusion of cattle and ongoing monitoring in the area of the Bettys Creek diversion will be coordinated in consultation with Glendell. •The abandoned Bettys Creek channel will be managed (i.e. weed control and exclusion of cattle) in conjunction with the ongoing management and monitoring of the proposed diversion. •Based on the ephemeral nature of the existing channel, consideration will be given to blocking off the abandoned channel at the downstream end to act as a billabong to retain any surface flows. •Undertake pre-clearance inspections of borehole sites. Where possible, the inspections will be undertaken during the summer flowering period to optimise detection of Bothriochloa biloba and to avoid impacting directly on any individual plants Continuous, as required.	Bettys Creek Diversion by Integra UG is not required to be constructed as this is in relation to mining in the Hebden and Barret Seams. Mining during the audit period occurred in the Middle Liddell Seam only. Biodiversity assessments conducted at the Mount Owen Bettys Creek Diversion are conducted and have been documented against Schedule 3, Condition 32.	Not Triggered	
	HERITAGE				
00194	Operations are managed such that adverse impacts to significant Aboriginal and Historical heritage items are avoided, minimised and/or offset.	Artefact scatters (sites 37-3-0597, 37-3-0595 and 37-3-0027) that will be destroyed by the proposed Bettys Creek diversion will be salvaged and involve the following. •During clearing works in the areas where surface earthworks will occur, a qualified archaeologist will undertake field work with assistance from the Aboriginal community.	Main Creek Diversion by Integra UG is not required to be constructed as this is in relation to mining in the Hebden and Barret Seams. Mining during the audit period occurred in the Middle Liddell Seam only.	Not Triggered	

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
		Artefacts will be recorded individually and, once any site is salvaged, all materials and list of details collected for each artefact will be provided to the Local Aboriginal Land Council Prior to the diversion of Bettys Creek.			
00195		Monitoring of excavation works along the banks of Bettys Creek will be undertaken by a representative of the Aboriginal community. During excavations works undertaken for the diversion of Bettys Creek	Main Creek Diversion by Integra UG is not required to be constructed as this is in relation to mining in the Hebden and Barret Seams. Mining during the audit period occurred in the Middle Liddell Seam only.	Not Triggered	
00196		The area to be impacted by the realignment of Main Creek will be resurveyed with the assistance of the local Aboriginal community and any sites fully recorded and logged prior to the confirmation of the channels' locations and designs. Prior to the diversion of Main Creek	Main Creek Diversion by Integra UG is not required to be constructed as this is in relation to mining in the Hebden and Barret Seams. Mining during the audit period occurred in the Middle Liddell Seam only.	Not Triggered	
00197		Should the additional survey works in the area to be impacted by the realignment of Main Creek highlight any areas of high cultural or scientific significance, the alignment of the proposed works will be altered and / or subsurface investigations will be undertaken in consultation with OEH and the Secretary. Prior to the diversion of Main Creek	Main Creek Diversion by Integra UG is not required to be constructed as this is in relation to mining in the Hebden and Barret Seams. Mining during the audit period occurred in the Middle Liddell Seam only.	Not Triggered	
00198		Sites 37-3-0682, 37-3-0683 and any additional sites recorded during the survey will be salvaged prior to construction commencing and all activities requiring soil removal associated with the realignment of Main Creek will be monitored by representatives of the Aboriginal community. The salvage will: - be undertaken by a qualified archaeologist during clearing works in the areas where surface earthworks will occur with assistance from the Aboriginal community; and - include recording of individual artefacts. Once any site is salvaged, all materials and list of details collected for each artefact will be provided to the Local Aboriginal Land Council. - Prior to the diversion of Main Creek	Main Creek Diversion by Integra UG is not required to be constructed as this is in relation to mining in the Hebden and Barret Seams. Mining during the audit period occurred in the Middle Liddell Seam only.	Not Triggered	
00199		Monitoring of excavation works along the banks of Main Creek will be undertaken by a representative of the Aboriginal community. During excavations works undertaken for the diversion of Main Creek.	Main Creek Diversion by Integra UG is not required to be constructed as this is in relation to mining in the Hebden and Barret Seams. Mining during the audit period occurred in the Middle Liddell Seam only.	Not Triggered	
00200		Infrastructure will be sited to avoid impacts to known heritage sites. Should impacts be unavoidable, OEH and the local Aboriginal community representatives will be consulted. Continuous, as required.	Refer to evidence against Schedule 3, Condition 33.	Compliant	

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
00201		The Aboriginal community will be given the opportunity to collect any surface artefacts from the planned surface (remediation) activities.	Refer to evidence against Schedule 3, Condition 33.	Compliant	
		Prior to ground disturbing works in an area.			
00202		In consultation with the local Aboriginal community, the existing Aboriginal Cultural Heritage Management Plan (ACHMP) will be revised and built upon to detail management of project induced effects.	Refer to evidence against Schedule 3, Condition 33.	Compliant	
		Prior to the commencement of ground disturbing works			
00203	Ensure minimal subsidence impacts on archaeology.	OEH and the Local Aboriginal Community Representatives will be consulted should there be impacts to potential Aboriginal deposits as a result of remediation works along creeks and works to rehabilitate cracks.	Refer to evidence against Schedule 3, Condition 33.	Compliant	
		Prior to any remediation that may be required.			
00204		A qualified archaeologist will assess the potential impact of the planned works.	Refer evidence against Schedule 3, Condition 33. Integra UG engaged qualified archaeologists from OzArk to conduct archaeological assessments required under the AHMP.	Compliant	
		Prior to any remediation that may be required.			
00205		Should subsidence levels be greater than predicted, archaeological sub - surface testing may be undertaken in affected areas with the involvement of the Aboriginal stakeholders and OEH	This did not occur during the audit period.	Not Triggered	
		As required.			
00206		The Hebden SMPs to be developed will incorporate and build upon the existing Archaeology Subsidence Management Plan.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
		Prior to the commencement of proposed longwall mining in the affected area.			
	SURFACE WATER				
00207	Operations are managed such that adverse impacts to surface water are prevented, minimised and/or offset.	HV Coking Coal will maintain the existing surface water monitoring program, and undertake additional monitoring including collection of grab samples during or immediately after surface runoff events along ephemeral watercourses; monthly water quality sampling of major water major storages on the site; collection of data on water quantity and at least weekly collection of underground mine dewatering and raw water supply volume data.	Surface water monitoring is conducted in accordance with the approved SWMP which forms part of the site wide WMP. Refer to evidence against Schedule 3, Condition 31.	Compliant	
		Continuous, as required.			
00208		HV Coking Coal will maintain a photographic record of the creeks and dam walls to determine historical (baseline) rates of erosion.	Ecological monitoring and routine monthly environmental inspections include photographic evidence of monitoring and areas inspected and include creeks and dam walls. This was sighted by the auditors.	Compliant	
		Continuous, as required.			

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
00209		As part of the erosion and flood studies, HV Coking Coal will assess whether rapid changes in channel or floodplain form occur in the aftermath of runoff events. Continuous, as required.	Hansen Bailey conducted a Surface Water Impact Assessment for Integra Underground Mine Longwall Extension Modification (Modification 8). The study identified that <i>Subsidence may lead to the ponding of overland flow in localised shallow surface depressions on the Bettys Creek floodplain and rehabilitated areas of MOC. The ponding of overland flow has the potential to reduce catchment yield and flows in downstream rivers and flowpaths, lead to the accumulation of poor quality water on the floodplain. The study also identified indirect impacts on Bettys Creek channel and floodplain.</i> The auditors obtained evidence that rainfall inspections are carried out after rainfall events. It is noted that the rainfall inspection form prompts monitoring of any notable changes to Glennies Creek Flood Plain and Channel and to Mains Creek Flood Plain and Channel. The form does not include prompts to monitor changes to Bettys Creek Flood Plain and Channel. Management measures to manage changes in channel or floodplain form are outlined in the WMP however these measures were not triggered during the audit period.	Compliant	IEA OFI 19 – it is recommended that the rainfall inspection form be updated to prompt monitoring of any notable changes to Bettys Creek Flood Plain and Channel
00210		Monitoring results will be reported in the AEMR and distributed to the relevant Government agencies, CCC members and other relevant stakeholders. Annually	Surface water monitoring results are summarised in Section 7.5 of the Annual Reviews. Annual Reviews are distributed to the required stakeholders as per Department instructions and made publicly available on the Integra UG website. Refer evidence against Schedule 5, Condition 11.	Compliant	
00211		HV Coking Coal will prepare: • a response strategy to address any destabilisation of Main Creek; • a works programming for any necessary remedial works in Main Creek should subsidence expression initiate incision and headward erosion; • an outline of expansion of piezometric monitoring; and • a TARP as part of a surface water and groundwater monitoring and management program. Prior to Hebden Seam longwall mining undermining Man Creek.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
00212		No impacts will occur to licensed water users, basic landholder rights or minimum baseflows in Glennies Creek regulated river or environmental water requirements. Continuous	Refer to evidence against Schedule 3, Condition 30.	Compliant	
00213		A Site Water Management Plan will be prepared outlining management measures associated with potential erosivity of the Bettys Creek diversion or degradation of Glennies Creek and any subsidence effects that may occur on the diversion or Glennies Creek and its associated alluvium. Prior to the commencement of proposed longwall mining in the affected area.	Refer to evidence against Schedule 3, Condition 31.	Compliant	
00214		The mine plan will be developed and operated such that no detectable or measurable ingress of surface water into the mine workings will be generated that can't be reversed.	The MOP was updated in 2018 to cover the term 2018 – 2023. Integra UG appointed Engeny Water Management to conduct quarterly reviews of Integra UG and Rix's Creek North Water Transfers. These reviews include an assessment of seepage inflows. Evidence obtained by the auditors did not indicate that ingress of surface water into mine workings has occurred that cannot be reversed by dewatering of the underground workings.	Compliant	

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
		Prior to the commencement of proposed longwall mining in the affected area.	Refer to evidence against Schedule 3, Condition 23.		
00215		HV Coking Coal will not restrict Glencore's ability to stabilise and reconfigure the diversion to Bettys Creek, and will develop an updated Site Water Management Plan to manage any adverse impacts from extraction of the Hebden Seam panels, including the collection of monitoring data by an independent consultant agreed to by HV Coking Coal and Glencore prior to the diversion being undermined. Prior to the commencement of proposed longwall mining in the affected area.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
00216		HV Coking Coal will provide evidence that their water accounting procedure complies with dealings rules as prescribed under the Hunter Regulated River Water Sharing Plan (HRRWSP) and/or Hunter Unregulated River and Alluvium Water Sharing Plan (HURAWSP). Continuous, as required.	Integra UG's Water Accounting Framework and Site Water Balance model was sighted by the auditors. The Site Water Balance utilises the Goldsim model which has been prepared for the Greater Ravensworth Water Sharing Scheme. Refer evidence against Schedule 3, Condition 22 and 23.	Compliant	
00217		HV Coking Coal will ensure it has sufficient water to meet mine operational demands in accordance with the statutory rules of the Hunter Regulated River Water Sharing Plan (HRRWSP) and/or Hunter Unregulated River and Alluvium Water Sharing Plan (HURAWSP), and any other statutory instruments in force under the Water Act 1912, and Water Management Act 2000. Should insufficient water be available to continue mining operations, mining operations will be scaled back to meet water supply requirements. Continuous, as required.	Refer to evidence against Schedule 3, Condition 22.	Compliant	
00218		any proposed workings under Glennies Creek and its associated alluvium will be designed to be stable in the long term, taking site conditions into consideration. Continuous, as required.	Refer to findings against Schedule 3, Condition 30. This condition was not triggered due the location of mining across Longwalls 13-16 during the audit period.	Not Triggered	
GROUNDWATER					
00219	Operations are managed such that adverse impacts to local and regional groundwater resources are prevented, minimised and/or offset.	The current groundwater monitoring program will continue with ongoing review and possible modification of the program as further data is obtained and interpreted. Annual reports documenting and interpreting the collected data will be prepared Continuous, as required.	Surface water monitoring is conducted in accordance with the approved GWMP which forms part of the site wide WMP. A summary of groundwater monitoring is provided in Section 7.6 of the Annual Reviews. Refer to evidence against Schedule 3, Condition 31.	Compliant	
00220		Groundwater samples will be collected annually from selected piezometers and analysed at a NATA registered laboratory for major ions and selected metals. The groundwater program will be maintained in its current form, with a review of the program after interpretation of the first 12 months' data. Annually, as required.	Groundwater monitoring is conducted in accordance with the approved WMP. Refer to Schedule 3, Condition 31.	Compliant	

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
00221		A private well monitoring program will be initiated to determine its pre mining yield if requested by a private bore owner. 12 months prior to extraction of the Barrett Seam (subject to the timing of any request).	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
00222		Should a reduction in groundwater availability be detected, remedial action will be undertaken by HV Coking Coal to offset the measured losses. Such actions may include digging the well deeper, installing a new well or installing a replacement bore. Subsequent to detecting a loss of groundwater availability due to mining	Refer to evidence against Schedule 3, Condition 30.	Compliant	
00223		Performance indicators will be identified and a statistical assessment will be undertaken to detect when, or if, a significant change has occurred in the groundwater system and to benchmark the natural variation in groundwater quality and standing water levels. Prior to longwall mining in the Hebden Seam.	Mining during the audit period occurred in the Middle Liddell Seam only. No mining of the Barret or Hebden seams was conducted.	Not Triggered	
00224		Contingency procedures will be developed. Activation of contingency procedures will be linked to the assessment of monitoring results. As required	If the groundwater monitoring results are outside the groundwater trigger value range for three consecutive monitoring events (as stated outlined in the WMP), further investigations are conducted in accordance with the Groundwater Trigger Action Response Plan (TARP) detailed in the WMP. Refer to findings against Schedule 3, Condition 30.	Compliant	
00225		Following the completion of extraction of each longwall panel, a report will be prepared that summarises relevant monitoring data. Relevant monitoring and management activities for each year will also be reported in the AEMR. Following the completion of extraction of each longwall panel and in the AEMR	End of panel reports are prepared at the completion of extraction of each longwall panel. End of panel reports prepared by external consultant SCT were sighted for Longwalls 13, 14 and 15. Results from groundwater monitoring are summarised in the Annual Reviews.	Compliant	
AIR QUALITY					
00226	Operations are managed to minimise potential adverse impacts to the environment, residences and the community	Implement the following air quality control procedures. - Coal handling areas, stockpiles, roads and trafficked areas will be maintained in a moist condition using water carts and / or water sprays to minimise wind-blown and traffic-generated dust. - Water sprays will be used at the longwall and development face to control particulates. - All haul roads will have edges clearly defined with marker posts or equivalent to control their locations, especially when crossing large overburden emplacement areas. - Obsolete roads will be ripped and re-vegetated; - Development of minor roads will be limited and the locations of these will be clearly defined. - Minor roads used regularly for access etc will be watered/treated to control dust. - Due to OHS regulations regarding underground air quality, dust generated underground will be minimised. Currently this	Observations made during the audit site inspection were the following: - Water carts and water sprinklers were sighted in operation at the portal surface ensuring the entrance and trafficked areas remained in a moist condition. - Haul roads and internal light vehicle roads within the portal top area were well defined with markers in place. - Active haul roads with coal transport vehicles (dump trucks) were managed by Bloomfield Coal and not accessible by Integra - Evidence of a temporary track constructed and utilised during construction associated with Modification 8 of PA 08_0101 being rehabilitation was sighted. - No additional minor roads were noted to have been constructed during the audit period. - The site inspection did not incorporate an inspection of underground workings. - Minimal dust was observed being generated by Integra UG's operations at the time of the audit site inspection.	Compliant	

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
		includes the application of water and/or use of dust suppressants.			
		Continuous, as required.			
00227		HV Coking Coal will continue air monitoring in accordance with the Integra Underground EMS Procedure 002-2, Air Quality Monitoring Program, including monitoring weather conditions, TSP, PM10 (using HVAS), real time PM10 (using TEOM) and dust fallout	Air quality monitoring is conducted in accordance with the site wide AQGGMP. Refer to findings against Schedule 3, Condition 12 and 15.	Compliant	
		Continuous.			
		The results of the ongoing air quality monitoring program will be communicated to residents in the Local Community.	Air quality monitoring is summarised in the quarterly environmental monitoring reports which are available on the Integra UG Public website. Air quality monitoring is also summarised in the Annual Reviews and discussed at the biannual CCC meetings.	Compliant	
		Continuous, as required.			
GREENHOUSE GAS					
00228	Manage operations such that greenhouse gas emissions on the environment are minimised and beneficial use of methane is maximised.	Fugitive methane emissions will be captured for energy generation where possible. If not feasible, flaring will be adopted, where practicable.	Refer to evidence against Schedule 3, Condition 11	Compliant	
		Continuous			
00229		Greenhouse gas emissions will be estimated and reported annually.	Refer to evidence against Schedule 3, Condition 11	Compliant	
		Following commencement of proposed mining			
00230		Energy and greenhouse gas emission reduction initiatives will be implemented throughout the life of the development, including the following. • The efficiency of all new and upgraded mobile and fixed equipment will be considered during procurement for fuel powered equipment. • Ensuring equipment will be maintained to retain high levels of energy efficiency. • The inventory of emissions developed for this environmental; assessment will be maintained. • Emissions and abatement strategies will be reported annually as part of the internal environmental reporting and National Greenhouse and Energy Reporting obligations and in the AEMR.	Greenhouse gas management is undertaken in accordance with the Air Quality and Greenhouse Gas Management Plan (AQGGMP). Refer evidence against Schedule 3, Condition 11 and Condition 15.	Compliant	
		Continuous, as required.			
NOISE AND VIBRATION					
00231	Operations are managed to minimise potential adverse impacts on the environment, residences and the community.	HV Coking Coal will implement the following noise management procedures and monitoring programs. • Use of conveyors instead of haul roads where approved. • Construction of acoustic bunds adjacent to haul roads where recommended by an acoustic consultant.	Observations made during the audit site inspection and evidence reviewed regarding noise management has been summarised below: • Conveyors are in place to transport coal from underground to the ROM Coal Stockpile Coal is transported by Bloomfield to the Rix's Creek Coal Handling Preparation Plan for processing via haul trucks.	Complaint	

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
		• Use of routine monitoring results to retine on-site noise mitigation measures and operating procedures. • Undertake noise audits at boundary positions to static sources to verify potential change in overall sound emissions. • Undertake regular discussions with potentially affected residents to proactively identify noise related issues of concern. • Undertake quarterly monitoring at identified representative receivers. • Implement acoustic mitigation at residences where exceedances of the project specific criteria are demonstrated via the monitoring program and requested by the landowner. • Consideration of negotiated agreements with landowners where exceedances of the project specific criteria are substantiated by monitoring. • Informing residents that the existing community information line for Integra Underground would apply to this proposal. • Existing and / or additional real time noise monitoring will be utilised to manage, assess and control potential emissions from site. Continuous, as required.	• A combination of attended, unattended and meteorological monitoring is conducted in accordance with the NMP. Noise trigger exceedance protocols were not triggered during the audit period. • Compliance monitoring of noise criteria is managed through attended noise monitoring. Section 4.2 of the NMP provides an overview of the attended noise monitoring undertaken by Integra. • Attended noise monitoring was conducted on a quarterly basis during the audit period by external consultant Umwelt. During construction associated with modification 8 of PA 08_0101, Umwelt increased the monitoring frequency to monthly, as specified in Section 4.2.1 of the NMP. • Integra UG maintains regular inter-mine consultation with neighbouring mines. • Glencore have in place a procurement process which requires the review of all new equipment. An 'Introduction to Site' checklist is completed for all new plant and equipment. Within this checklist there is a requirement for noise emissions to be reviewed. • An 'Introduction to Site Checklist – for Light Vehicles' is completed for all light vehicles, which requires a check for reversing alarms to be conducted. This ensures that only broadband reversing alarms are utilised on all vehicles. Refer to evidence against Schedule 3, Condition 9.		
00232		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	Integra UG do not undertake blasting. Blasting practices conducted by MOC and Rix's Creek are discussed at the monthly inter-mine meetings.	Compliant	
00233		Integra will investigate the feasibility of installing an overland conveyor to transport coal from the Integra Underground to the Integra CHPP and provide the outcomes of that investigation to the Secretary. Prior to 30 June 2010	This condition pre-dates the audit period. Coal extracted by Integra UG is processed by Bloomfield at the Rix's Creek CHPP.	Not Triggered	
TRANSPORT					
00234	Management of rail infrastructure.	A new Mt Owen Rail Spur Management Plan will be prepared in consultation with GMO, and will include monitoring, stakeholder consultation and mitigation measures. Prior to the commencement of proposed longwall mining in the affected area.	Management of the MOC rail infrastructure is conducted in accordance with the approved Extraction Plans. Refer to Schedule 3, Condition 20.	Compliant	
00235	Management of roads.	Current traffic and transport management measures will continue. In addition, linemarking of Stony Creek Road and Middle Falbrook Road will be undertaken if requested by Council. Continuous.	Singleton Shire Council had not requested any additional traffic or transport management measures during the audit period.	Not Triggered	
WASTE					

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
00236	Avoidance of unnecessary resource consumption; reuse, reprocessing, recycling and energy recovery wherever possible and, where this is not possible, disposal of wastes in an environmentally responsible manner.	Wastes will continue to be managed in accordance with the Integra Underground Procedure PRO_0381 - Waste Management, including the following. • Reuse of mine water for dust suppression at the Integra Underground and Open Cut, in the CHPP and at neighbouring mines. • All waste oils will be pumped into on site storage tanks for subsequent transfer to a registered waste disposal company. • Old batteries will be stored in a designated bin prior to collection by a licensed contractor. • All scrap steel will be stored in dedicated skips and sold to scrap steel merchants for recycling. • Bulk chemical containers will be returned to suppliers for reuse as part of the supply agreement. • Pallets will be collected by a recycling contractor. • Colour-coded recycling containers will be placed in identified areas for collection of cardboard and paper products and collected regularly by licensed contractors / recyclers. • Sewerage waste from site offices, administration building, maintenance areas and bath houses will be treated using an aerated wastewater treatment system before being discharged to an anaerobic and aerobic dam system. The water will then be irrigated onto adjacent land. • Sludge from the aerated wastewater systems will be pumped out as required by contractors and disposed of to a licensed facility. • Hazardous materials will be stored in accordance with Australian Standards. • Old paints /preservatives, disused chemicals, solvents and coolants will be stored in allocated areas prior to being removed by a licensed hazardous waste contractor. • Liquid waste from parts washers will be stored in 200L containers for removal by licensed waste contractors. • Waste oil filters will be taken to a recycling facility by a registered waste disposal contractor. • Materials containing liquids will be removed by a licensed contractor for recycling or disposal at a licensed waste management facility. • Domestic wastes and maintenance consumables will be separated and collected by waste contractors. Continuous, as required.	Refer to findings against Schedule 3, Condition 36.	Compliant	
	REHABILITATION				
00237	That effective rehabilitation is undertaken at the completion of mining.	Rehabilitation associated with proposed mining will be undertaken in accordance with the relevant MOP, REMP, Extraction Plans and SMPs. Following the completion of mining in the affected area	Refer findings against Schedule 3, Condition 38, 39 and 40.	Compliant	
	SOCIO-ECONOMIC				

Ref No.	Desired Outcome	Existing or Proposed Actions & Timing	Comments and Evidence	Finding	Recommendation
00238	Net benefits of the proposal sufficiently outweigh potential adverse impacts.	A social impact monitoring strategy will be developed that quantifies the impacts on the local community and the effectiveness of strategies implemented in minimising these impacts. Following commencement of proposed longwall mining in the affected area.	Integra UG maintain a Stakeholder Engagement Strategy. The 2017 IEA made an opportunity for improvement for Integra UG to consider identifying a suite of parameters/metrics that can be monitored through the projects life cycle to enable monitoring of both positive and negative social impacts. Integra UG measure the following parameters as part of Glencore's corporate monitoring: - Financial contributions to training and employment - Financial spend to local and regional areas - Direct financial contributions to the community organisations. Glencore did not consider additional actions were required.	Compliant	

Audit Checklist – Environmental Protection Licence 3390

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G1 Copy of licence kept at the premises or plant

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Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation									
1 Administrative Conditions														
A1 What the licence authorises and regulates														
EPL-1	A1.1	This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition. <table><tr><th>Scheduled Activity</th><th>Fee Based Activity</th><th>Scale</th></tr><tr><td>Coal works</td><td>Coal works</td><td>> 2000000 - 5000000 T annual handing capacity</td></tr><tr><td>Mining for coal</td><td>Mining for coal</td><td>> 2000000 - 3500000 T annual production capacity</td></tr></table> <i>Note: In relation to this licence, the licensee must comply with:</i> <i>a) the activity scale limits imposed by this licence;</i> <i>b) the activity scale limits which apply for the reporting period specified in this licence; and</i> <i>c) the activity scale limits imposed by other legal instruments, such as approvals currently in force under the Environmental Planning and Assessment Act 1979.</i>	Scheduled Activity	Fee Based Activity	Scale	Coal works	Coal works	> 2000000 - 5000000 T annual handing capacity	Mining for coal	Mining for coal	> 2000000 - 3500000 T annual production capacity	Tracking of coal production is managed by the Integra UG mining engineering department. The auditors sighted the production reporting model spreadsheet for 2020 which details the daily (run-of-mine) ROM coal extraction figures. Integra UG’s Environment and Community (E&C) department summarise the annual ROM coal extraction figures from the Production Reporting Model Spreadsheet and report these figures in the Annual Reviews. Annual ROM coal extraction quantities include the following for the audit period: • 2018: 2,219,076 tonnes extracted • 2019: 2,629,615 tonnes extracted • 2020: 2,644,481 tonnes extracted (Figures provided up to 30 November 2020). Integra UG recorded extraction volumes below the limit of 4.5 million tonnes per calendar year. Evidence: • Integra UG Production Reporting Model 2020 Spreadsheet • Annual Reviews 2018 & 2019	Compliant	
Scheduled Activity	Fee Based Activity	Scale												
Coal works	Coal works	> 2000000 - 5000000 T annual handing capacity												
Mining for coal	Mining for coal	> 2000000 - 3500000 T annual production capacity												
A2 Premises or plant to which this licence applies														
EPL-2	A2.1	The licence applies to the following premises: <table><tr><th>Premises Details</th></tr><tr><td>INTEGRA UNDERGROUND</td></tr><tr><td>MIDDLE FALBROOK ROAD</td></tr><tr><td>GLENNIES CREEK</td></tr><tr><td>NSW 2330</td></tr><tr><td>SURFACE PREMISES SHOWN BY PLAN TITLED "FIGURE 1: PLAN OF PREMISES - INTEGRA UNDERGROUND SURFACE AREAS EPL 3390" DATED 5/9/17 AND THE SPATIAL FILES EPA REFERENCE DOC17/497320 AND UNDERGROUND MINING IN HEBDEN SEAM AND MIDDLE LIDELL SEAM SHOWN BY PLAN TITLED "FIGURE 3: PLAN OF THE PREMISES - INTEGRA UNDERGROUND SURFACE AREAS EPL 3390" DATED 3/4/2020 EPA REFERENCE DOC20/219762-1.</td></tr></table>	Premises Details	INTEGRA UNDERGROUND	MIDDLE FALBROOK ROAD	GLENNIES CREEK	NSW 2330	SURFACE PREMISES SHOWN BY PLAN TITLED "FIGURE 1: PLAN OF PREMISES - INTEGRA UNDERGROUND SURFACE AREAS EPL 3390" DATED 5/9/17 AND THE SPATIAL FILES EPA REFERENCE DOC17/497320 AND UNDERGROUND MINING IN HEBDEN SEAM AND MIDDLE LIDELL SEAM SHOWN BY PLAN TITLED "FIGURE 3: PLAN OF THE PREMISES - INTEGRA UNDERGROUND SURFACE AREAS EPL 3390" DATED 3/4/2020 EPA REFERENCE DOC20/219762-1.	This is noted	Noted				
Premises Details														
INTEGRA UNDERGROUND														
MIDDLE FALBROOK ROAD														
GLENNIES CREEK														
NSW 2330														
SURFACE PREMISES SHOWN BY PLAN TITLED "FIGURE 1: PLAN OF PREMISES - INTEGRA UNDERGROUND SURFACE AREAS EPL 3390" DATED 5/9/17 AND THE SPATIAL FILES EPA REFERENCE DOC17/497320 AND UNDERGROUND MINING IN HEBDEN SEAM AND MIDDLE LIDELL SEAM SHOWN BY PLAN TITLED "FIGURE 3: PLAN OF THE PREMISES - INTEGRA UNDERGROUND SURFACE AREAS EPL 3390" DATED 3/4/2020 EPA REFERENCE DOC20/219762-1.														
A3 Other activities														
EPL-3	A3.1	This licence applies to all other activities carried on at the premises, including: <table><tr><th>Ancillary Activity</th></tr><tr><td>Sewage Treatment Systems</td></tr></table>	Ancillary Activity	Sewage Treatment Systems	This is noted	Noted								
Ancillary Activity														
Sewage Treatment Systems														
A4 Information supplied to the EPA														
EPL-4	A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to: a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.	Integra UG reported that no works or activities outside those specified in the EPL application were undertaken during the audit period. The original licence application was not reviewed. No works or activities outside those specified in EPL 3390 were observed during the site inspection.	Compliant										

2 DISCHARGES TO AIR AND WATER AND APPLICATION TO LAND

P1 Location of monitoring/discharge points and areas

EPL-5	P1.1	The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point. <table><tr><th colspan="4">Air</th></tr><tr><th>EPA identi- fication no.</th><th>Type of Monitoring Point</th><th>Type of Discharge Point</th><th>Location Description</th></tr><tr><td>1</td><td></td><td>Discharge to air</td><td>Gas Flare at co-ordinates 321865 6408073 (Easting Northing) shown as C on Figure 1.</td></tr><tr><td>2</td><td></td><td>Discharge to air</td><td>Gas Flare at co-ordinates 321867 6408083 (Easting Northing) shown as D on Figure 1.</td></tr><tr><td>3</td><td></td><td>Discharge to air</td><td>Gas Flare at co-ordinates 321887 6408080 (Easting Northing) shown as E on Figure 1.</td></tr><tr><td>4</td><td></td><td>Discharge to air</td><td>Gas Flare at co-ordinates 321886 6408070 (Easting Northing) shown as F on Figure 1.</td></tr></table>	Air				EPA identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description	1		Discharge to air	Gas Flare at co-ordinates 321865 6408073 (Easting Northing) shown as C on Figure 1.	2		Discharge to air	Gas Flare at co-ordinates 321867 6408083 (Easting Northing) shown as D on Figure 1.	3		Discharge to air	Gas Flare at co-ordinates 321887 6408080 (Easting Northing) shown as E on Figure 1.	4		Discharge to air	Gas Flare at co-ordinates 321886 6408070 (Easting Northing) shown as F on Figure 1.	Noted	Noted																																							
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EPL-6	P1.2	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.	None Specified	Noted																																																															
EPL-7	P1.3	The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point. <table><tr><th colspan="4">Water and land</th></tr><tr><th>EPA Identi- fication no.</th><th>Type of Monitoring Point</th><th>Type of Discharge Point</th><th>Location Description</th></tr><tr><td>6</td><td>Discharge to utilisation area Effluent Quality Monitoring</td><td>Discharge to utilisation area Effluent Quality Monitoring</td><td>STP monitoring and discharge at co-ordinates 324253 6406459 (Easting Northing) shown as A on Figure 1.</td></tr><tr><td>7</td><td></td><td>Discharge to pipeline</td><td>Mine water transfer to Mt Owen Mine at co-ordinates 321205 6410621 (Easting Northing) shown as MWT9 on Figure 1.</td></tr><tr><td>8</td><td>Ambient water quality monitoring</td><td></td><td>Upstream monitoring of Glennies Creek at co-ordinates 326010 6408140 (Easting Northing) shown as GC1 of Figure 1.</td></tr><tr><td>9</td><td>Ambient water quality monitoring</td><td></td><td>Monitoring of Glennies Creek at co-ordinates 323210 6407125 (Easting Northing) shown as GC2 of Figure 1.</td></tr><tr><td>10</td><td>Ambient water quality monitoring</td><td></td><td>Downstream monitoring of Glennies Creek at co-ordinates 323035 6406115 (Easting Northing) shown as GC3 of Figure 1.</td></tr><tr><td>11</td><td>Ambient water quality monitoring</td><td></td><td>Upstream monitoring of Bettys Creek at co-ordinates 321310 6410280 (Easting Northing) shown as BC1 of Figure 1.</td></tr><tr><td>12</td><td>Ambient water quality monitoring</td><td></td><td>Monitoring of Bettys Creek at co-ordinates 320885 6409646 (Easting Northing) shown as BC2 of Figure 1.</td></tr><tr><td>13</td><td>Ambient water quality monitoring</td><td></td><td>Monitoring of Bettys Creek at co-ordinates 321077 6408513 (Easting Northing) shown as BC3 of Figure 1.</td></tr><tr><td>14</td><td>Ambient water quality monitoring</td><td></td><td>Monitoring of Main Creek at co-ordinates 322498 6407263 (Easting Northing) shown as MC3 of Figure 1.</td></tr></table>	Water and land				EPA Identi- fication no.	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EPL water monitoring locations are outlined in the WMP and in Appendix A of the quarterly environmental monitoring reports. Points with monitoring requirements are located at the locations outlined in the table below: <table><tr><th>EPA Monitoring Point</th><th>Location</th></tr><tr><td>6</td><td>Located at the onsite Sewage Treatment Plant</td></tr><tr><td>8</td><td>Referred to as GC1 and located on Middle Falbrook Road Bridge</td></tr><tr><td>9</td><td>Referred to as GC2 / W4 and located on Nobles Crossing</td></tr><tr><td>10</td><td>Referred to as GC3 and located on Glennies Creek</td></tr><tr><td>11</td><td>Referred to as BC1 and located on Bettys Creek</td></tr><tr><td>12</td><td>Referred to as BC2 and located on Bettys Creek</td></tr><tr><td>13</td><td>Referred to as BC3 and located on Bettys Creek</td></tr><tr><td>14</td><td>Referred to as MC3 and located on Main Creek</td></tr></table> Note: EPL Point 7 refers to the Mt Owen water transfer pipeline associated with Modification 7 of PA_0101 and is a discharge point not a monitoring point Evidence: - Water Management Plan - Integra UG Quarterly Environmental Monitoring Reports - Site Inspection	EPA Monitoring Point	Location	6	Located at the onsite Sewage Treatment Plant	8	Referred to as GC1 and located on Middle Falbrook Road Bridge	9	Referred to as GC2 / W4 and located on Nobles Crossing	10	Referred to as GC3 and located on Glennies Creek	11	Referred to as BC1 and located on Bettys Creek	12	Referred to as BC2 and located on Bettys Creek	13	Referred to as BC3 and located on Bettys Creek	14	Referred to as MC3 and located on Main Creek	Compliant	
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EPL-8	P1.4	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.	EPL noise monitoring locations are outlined in the NMP and in Appendix A of the quarterly environmental monitoring reports. Monitoring is undertaken at locations near/representative of the privately-owned receptors. These locations are consistent with EPL requirements and the locations are representative of those NAGs that retain private properties identified in PA 08_0101or contain ‘any other private land’.	Compliant																																																															

		Noise/Weather <table><thead><tr><th>EPA identi- fication no.</th><th>Type of monitoring point</th><th>Location description</th></tr></thead><tbody><tr><td>15</td><td>Noise monitoring</td><td>Primary Noise Monitoring Point in NAG3 at co-ordinates 321812 6405438 (Easting Northing) shown as NMP 3 (Primary) in Figure 2.</td></tr><tr><td>16</td><td>Noise monitoring</td><td>Primary noise monitoring point in NAG 7 at co-ordinates 321655 6403870 (Easting Northing) shown as NMP 7 (Primary) in Figure 2.</td></tr><tr><td>17</td><td>Noise monitoring</td><td>Secondary noise monitoring point in NAG 4 at co-ordinates 320922 6405784 (Easting Northing) shown as NMP 4 (Supplementary to NMP 3) in Figure 2.</td></tr><tr><td>18</td><td>Noise monitoring</td><td>Secondary noise monitoring point in NAG 6 at co-ordinates 319741 6403664 (Easting Northing) shown as NMP 6 (Supplementary to NMP 7) in Figure 2.</td></tr></tbody></table>	EPA identi- fication no.	Type of monitoring point	Location description	15	Noise monitoring	Primary Noise Monitoring Point in NAG3 at co-ordinates 321812 6405438 (Easting Northing) shown as NMP 3 (Primary) in Figure 2.	16	Noise monitoring	Primary noise monitoring point in NAG 7 at co-ordinates 321655 6403870 (Easting Northing) shown as NMP 7 (Primary) in Figure 2.	17	Noise monitoring	Secondary noise monitoring point in NAG 4 at co-ordinates 320922 6405784 (Easting Northing) shown as NMP 4 (Supplementary to NMP 3) in Figure 2.	18	Noise monitoring	Secondary noise monitoring point in NAG 6 at co-ordinates 319741 6403664 (Easting Northing) shown as NMP 6 (Supplementary to NMP 7) in Figure 2.	A map of the EPL noise monitoring locations is also provided on the Integra UG Public Website. Evidence: - Noise Management Plan - Integra UG Quarterly Environmental Monitoring Reports - Site Inspection		
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18	Noise monitoring	Secondary noise monitoring point in NAG 6 at co-ordinates 319741 6403664 (Easting Northing) shown as NMP 6 (Supplementary to NMP 7) in Figure 2.																		
EPL-9	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.	This is noted	Noted																
EPL-10	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.	This is noted	Noted																

3 LIMIT CONDITIONS

L1 Pollution of waters

EPL-11	L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	Integra UG is not authorised to discharge water offsite. The auditors reviewed the following evidence to justify compliance against this condition: - Complaints received during the audit period - Incidents recorded in Integra's internal incident register - Water monitoring data The auditors reviewed the Integra UG Complaints register for the audit period. No complaints were received in relation to water or discharges of water offsite. No incidents (reportable or non- reportable) were recorded in the CMO incident database during the audit period in relation to water. Monitoring data collected from the water monitoring program during the audit period did not indicate any exceedances of monitoring criteria which was concluded to be the results of Integra UG's operations. This is further discussed in the Groundwater and Surface Water Specialists reports appended to the 2020 IEA report. Evidence: - Water Management Plan - Integra UG Quarterly Environmental Monitoring Reports - Water Monitoring Data (2017-2020) - Site Inspection - Complaints register (audit period) - Incident Register (audit period)	Compliant	
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L2 Waste

EPL-12	L2.1	The Licensee must not dispose of any waste on the premises unless authorised to do so by the Licence.	Integra UG have developed an internal Waste Management Plan to outline the requirements for management of waste produced across the site. Waste management on site is undertaken by contractors JR Richards. JR Richards provides monthly waste data which includes a breakdown of the types of waste collected for disposal or recycling. Integra UG maintains a waste tracking spreadsheet as a corporate requirement which must be reported to Glencore	Compliant	
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			Corporate on a monthly basis. The waste management plan identifies waste streams, waste monitoring and tracking procedures and details management measures to ensure the generation of waste is minimised and recycling of waste is maximised where practicable. Evidence of waste segregation was observed during the audit site inspection. Separate bins for batteries, scrap metal, recycling, oil filters and cardboard recycling were observed. No evidence of waste being disposed of on site was identified by the auditors. Evidence: 2017, 2018 & 2019 Annual Reviews - Site Inspection - HVCC Underground Monthly Summary Report, JR Richards Waste Data Spreadsheet 2020 - HVCC Underground Monthly Summary Report, JR Richards Waste Data Spreadsheet 2019 - Waste Management Plan INTUG-793190785-874, Version 2.0, dated 07 February 2020 2020 Waste Tracking, NSW EPA Online Waste Tracking System, dated 18 June 2020 and 04 September 2020																																																																																		
EPL-13	L2.2	The licensee must not cause, permit or allow any waste to be received at the premises, unless authorised by the Licence.	No evidence of waste being received by Integra UG was identified during the audit.	Compliant																																																																																	
EPL-14	L2.3	The Licensee is authorised to receive saline mine water from Rixs Creek Mine for storage and use in activities authorised by the Licence.	Total water transfers are recorded by Integra UG and reported in the Annual Reviews. The auditors were informed that Integra UG did not receive saline mine water from Rix’s Creek during the audit period.	Noted.																																																																																	
L3 Noise limits																																																																																					
EPL-15	L3.1	Noise from the premises must not exceed the limits specified in the table below: <table><tr><th>Location</th><th>Day - LAeq (15 minute)</th><th>Evening - LAeq (15 minute)</th><th>Night - LAeq (15 minute)</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><tr><td>EPA Point 15</td><td>39</td><td>39</td><td>39</td><td>49</td></tr><tr><td>EPA Point 16</td><td>45</td><td>42</td><td>39</td><td>49</td></tr><tr><td>EPA Point 17</td><td>35</td><td>35</td><td>35</td><td>47</td></tr><tr><td>EPA Point 18</td><td>35</td><td>35</td><td>35</td><td>48</td></tr></table>	Location	Day - LAeq (15 minute)	Evening - LAeq (15 minute)	Night - LAeq (15 minute)	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	EPA Point 15	39	39	39	49	EPA Point 16	45	42	39	49	EPA Point 17	35	35	35	47	EPA Point 18	35	35	35	48	Integra UG’s Noise Management Plan (NMP) outlines that attended noise monitoring results are to be utilised to determine compliance with the sites EPL criteria. The auditors sighted the following evidence to verify compliance with EPL Condition L3.1: - Environmental noise monitoring reports prepared by Umwelt (2017-2020) - Noise data published in the 2017, 2018 and 2019 Annual Reviews, which concluded the following: 2017: Integra UG’s operations were inaudible throughout all monitoring periods 2018: Integra UG’s operations were inaudible throughout all monitoring periods 2019: Integra UG’s operations were inaudible throughout most monitoring periods and below criteria when audible. - Integra UG’s Quarterly Environmental Monitoring Reports (2017-2020) - Raw data available in Integra UG’s Environmental Monitoring Database (EMD) No exceedances of noise criteria were recorded during the audit period. In some instances, audible noise levels were recorded; however, in all instances the results indicate that noise levels recorded were below the compliance criteria. Evidence - Annual Reviews 2018 & 2019	Compliant	
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			- Letter from the Department approving the Noise Management Plan, dated 26 July 2019 - EMD Noise data (Sighted) - Environmental noise monitoring reports, Umwelt 2017-2020 - Integra UG Complaints Register (audit period) - Integra UG Incident Register (audit period)		
EPL-16	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.	This is noted	Noted	
EPL-17	L3.3	The emission limits identified at condition L3.1 apply under all meteorological conditions except for the following: (a) wind speeds greater than 3 metres/second at 10m above ground level; and (b) stability category F temperature inversion conditions and wind speeds greater than 2metres/second at 10 metres above ground level; or (c) stability category G temperature inversion conditions.	This is noted and accounted for in EPL monitoring reports prepared by Umwelt. Evidence Environmental noise monitoring reports, Umwelt 2017-2020	Noted	
EPL-18	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.	This is noted and complied with according to EPL monitoring reports prepared by Umwelt. Evidence Environmental noise monitoring reports, Umwelt 2017-2020	Compliant	
EPL-19	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	Meteorological data collected and analysed during the noise monitoring periods were recorded at the Glendell Mine (SentinelX 13) meteorological station which is located at the coordinates specified in Condition L3.5 of EPL 3390. Evidence - Discussion with Integra E&C Manager - AQGGMP	Compliant	
L4 Other limit conditions					
EPL-20	L4.1	Flares must be operated by the licensee such that there is no visible emission other than for a total period of no more than 5 minutes in any 2 hours, except for heat haze.	Emissions flared during the audit period are reported in the Annual Reviews. Flare emissions are inspected by the Integra UG E&C Department during the monthly environmental surface inspections. No complaints were received in relation to flare operation. Evidence - Discussion with Integra E&C Manager - Annual Review 2017 – 2019 - Monthly Environmental Surface Inspections 2018 - 2020	Compliant	
4 OPERATING CONDITIONS					
O1 Activities must be carried out in a competent manner					
EPL-21	O1.1	Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	a) Integra UG has established processes for managing the processing, handling, movement and storage of coal including: 24/7 site operational control which includes monitoring of site conditions and weather forecasts and other controls as required - Trained and competent staff - Spill recovery systems and processes to recover as much product coal as possible - Complaints and incident investigation process to determine the cause of a complaint or incident and implementation of control measures	Compliant	

			b) Integra UG manage waste in accordance with the Waste Management Plan. Waste management is coordinated and actioned by J.R Richards. Refer findings against condition L2.1-L2.3 of EPL 3390. Evidence Waste Management Plan	
O2 Maintenance of plant and equipment				
EPL-22	O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.	(a) Maintenance of plant and equipment Maintenance of plant and equipment at Integra UG is conducted in accordance with Glencore's 'Asset Management Framework'. The framework is a 17-element system which stipulates requirements from planning and procurement to maintenance and disposal. Glencore requires all sites to use SAP, which is a maintenance planning system that tracks manufacturer servicing and inspection requirements as well as other service and inspection intervals. The auditors verified that Integra UG uses SAP to manage maintenance requirements for all mining equipment and plant. SAP generates work orders for maintenance as required by the equipment or plant maintenance requirements. Mobile plant servicing is based on the number of hours operated. Stationary plant and equipment servicing is based on a calendar schedule. The auditors conducted a review of the maintenance of equipment related to environmental management of the site and noted the following: - Glencore Corporate has a group contract with Novecom to supply, inspect and maintain the real time monitoring network (noise and dust monitors) at all Glencore mines in New South Wales. Novecom implements an inspection and maintenance schedule in accordance with the relevant Australian standard. Examples of calibration certificates and service reports were sighted by the auditors. - The Meteorological Station is maintained by CBased Environmental. Annual inspection and calibration certificates were sighted by the auditors. - Two oil water separators are operational on site, including a separator at the portal wash down area and a separator at the mine workshop. The auditors reviewed the maintenance schedule for the oil water separator located in the portal area. - Specialist consultant's Umwelt Environmental & Social Consultants (Umwelt) are engaged by Integra UG to conduct attended noise monitoring. Certificates of calibration for the Sound & Vibration Analyzer and sound level calibrator were sighted by the auditors. - Waste and spill containment equipment is maintained by J.R Richards. Spill containment equipment was sighted by the auditors during the site inspection. (b) Operation of plant and equipment An environmental induction (General Environmental Awareness) is presented to all personnel during site induction, as part of the overall site familiarisation. The environmental induction includes references to site approvals and licences and outlines workers' environmental responsibilities including incident reporting and key environmental risks and mitigation measures. Only qualified and inducted personnel are permitted to operate specific plant and equipment on site. Integra UG maintains a stringent training and approval process with regards to operation of light vehicles in the pit area and operation of mine specific vehicles and plant. Evidence:	Compliant

			- Glencore Asset Management Portal (sighted on intranet) - Glencore – Element 4, Equipment Maintenance Strategy - Site Inspection - SAP maintenance orders – sample during audit period - Calibration Certificate No. SL 22355 & FILT 4741		
EPL-23	O2.2	The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.	Integra UG has an on-site sewage treatment system (OSSM Approval Number 3969/2008), which includes a primary aeration tank with a secondary maturation pond and a package sewage treatment plant. Wastewater from the system is dispersed by irrigation sprays on dedicated irrigation areas. Monitoring is conducted on wastewater processed by the sewage treatment system for pH and Faecal coliforms in accordance with Council Approval 3969/2008 and EPL 3390 Condition M2.2. Quarterly maintenance of the on-site sewage treatment system is conducted by external contractor Garden Master Hunter Pty Limited. Evidence: - Quarterly Maintenance Report, Garden Master Hunter Pty Ltd, dated 18 November 2019 - Quarterly Maintenance Report, Garden Master Hunter Pty Ltd. Dated 18 February 2020 - Quarterly Maintenance Report, Garden Master Hunter Pty Ltd. Dated 20 May 2020 - Quarterly Maintenance Report, Garden Master Hunter Pty Ltd. Dated 20 August 2020 - Effluent Monitoring	Compliant	
EPL-24	O2.3	The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O2.4.	Inspection records were provided to the auditors for review. Actions resulting from the inspections are recorded on the inspection record and followed up by the maintenance contractor in conjunction with Integra UG personnel.	Compliant	
EPL-25	O2.4	The licensee must prepare a sewage treatment system maintenance program. The program must include: a) Certification from the system provider that the sewage treatment system is operating within its capacity; b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and c) Provide written records of each quarterly inspection.	Integra UG submit the sewage treatment quarterly maintenance reports along with the Annual Returns to the EPA each year. The quarterly maintenance reports were reviewed by the auditors. The following was identified: - The maintenance reports do not record the time that maintenance procedures were carried out. From November 2019 onwards, the time has been written onto the maintenance reports, however prior to this the date time was not recorded. This finding has triggered a non-compliance of Condition O2.4 of EPL 3390 however as Integra were capturing the time on the maintenance records since November 2019 no recommendation is required. - The reports validate, using a yes/no checklist format, that the following is occurring: - The system is safe - Condition of electrical components - Condition of Air blower - Condition of air & sludge return systems - Condition of septic chamber - Condition of Irrigation chamber - Condition of disposal area Actions are provided at the end of the report as well as overarching comments from the technician. It is noted that the report does not provide formal certification that the sewage treatment system is operating within its capacity however the system is maintained as per maintenance	Not Compliant ADMIN NC	Recommendation not required as Integra UG updated the maintenance report forms in November 2019. Maintenance forms as of November 2019 capture the time that maintenance procedures are carried out. Recommendation not required

			requirements stipulated by the system provider. During required quarterly maintenance of the system the service provider verifies the system is operating within its capacity and . As such, the auditors consider Integra UG is complying with the requirements of Condition O2.4 of EPL 3390.	
O3 Dust				
EPL-26	O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Key dust generating activities at Integra UG include: • Haulage of coal from the ROM coal stockpile to the project boundary. • Windblown dust from the pit top and ventilation infrastructure areas. • Construction activities • Exploration activities • Gas drainage works • Ventilation works • Subsidence remediation works. Management and contingency measures are triggered by visual monitoring and alerts from the real time operational monitoring and forecast systems as outlined in the Dust Management TARP. The Dust Management TARP contains a number of triggers including monitoring triggers, operational triggers and weather condition alarms. It is noted that the AQGGMP does not refer to the dust management TARP. Other dust management measures in place at the time of the audit included: • Progressive rehabilitation sighted during the site inspection. • Water carts – Integra UG have a contract with A Plus to conduct dust suppression onsite. Water is sprayed on the pit top area and a second cart is used for dust suppression during construction / rehabilitation activities away from the pit top. • Water sprays – these are installed at the pit top (along the access road and conveyor belt) and are automated and managed by the Surface Mechanical Coordinator. • Internal TEOM monitoring network - should a TEOM record a dust exceedance, an automatic alert is sent to the Integra UGE&C department and relevant personnel (via Sentinex). An investigation is then conducted, which involves a review of Met data, operations occurring on site and air quality monitor readings at other, nearby monitors. An internal dust investigation report is completed and kept on file. If the investigation determines that Integra UG are the source of the exceedance, then this would be reported as an exceedance of air quality criteria in Table 9 of PA 08_0101. This had not occurred during the audit period. • Integra UG's E&C department review meteorological conditions every morning and issue correspondence to alert personnel to the higher risk to air quality impacts. • Monthly and weekly environmental inspections are conducted by the E&C department. The management measures detailed above are outlined in the AQGGMP, with the exception of internal compliance monitoring measures such as the dust TARP. A review of monitoring results, complaints received, and incidents recorded as well as site inspection findings indicates that best practice air quality management was being implemented on site during the audit period. Evidence: • Air Quality TARP (793190785-1484)	Compliant

			- Email from the E&C Manager to the E&C department, dated 13 November 2019 - Dust Exceedance Report – Internal, dated 29 November 2020 - Site Inspection - E&C department monthly environmental inspections - E&C department weekly surface inspections		
EPL-27	O3.2	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	Refer to evidence against Condition O3.1 of EPL 3390.	Compliant	
EPL-28	O3.3	All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.	Coal handling areas, roads and trafficked areas were maintained in a moist condition using a combination of mobile water carts and automated water sprays. It is noted that no chemical stabilisers are used at Integra UG for dust suppression despite being stated in the AQGGMP. A mobile water cart is also in place for use during construction or surface disturbance works. Integra UG engage external contractor 'A Plus' to conduct water cart services. Evidence: - AQGGMP - Site Inspection	Compliant	
O4 Effluent application to land					
EPL-29	O4.1	Application of wastewaters must only be applied at a rate that can be assimilated by the effluent discharge utilisation area and its evapotranspiration capacity.	The auditors were informed that the discharge utilisation area is inspected weekly by Integra UG maintenance personnel who report to the Surface Mechanical Coordinator. Completed inspection forms were provided for review. The utilisation area is also reviewed monthly by the Integra UG E&C. The utilisation area was inspected by the auditors and surface water specialist. The utilisation area is bunded to ensure any potential runoff cannot leave the area. Evidence: - Site Inspection - Surface Infrastructure inspection form, INTUG-157328107-1522, dated 26 November 2020 - E&C department monthly environmental inspections	Compliant	
EPL-30	O4.2	The licensee must ensure that the effluent discharge utilisation area perimeter is fenced and signposted "Effluent Re-Use Area Keep Out" and controlled in a manner to ensure exclusion of persons from that area.	Fencing and signage of the effluent discharge utilisation area were sighted during the audit site inspection. Evidence: Site Inspection	Compliant	
EPL-31	O4.3	The licensee must ensure that sprays or mists from irrigation do not drift beyond the boundary of the effluent discharge utilisation area and that no ponding occurs.	No evidence of sprays or mists being located in an area which would cause irrigation to drift beyond the boundary of the effluent discharge utilisation area or cause ponding was sighted. It is noted that the irrigation system was not operating at the time of the audit site inspection. Evidence: Site Inspection	Compliant	
O5 Emergency response					
EPL-32	Note	The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The licensee must keep the incident response plan on the premises at all times. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. The licensee must develop a Pollution Incident Response	Integra UG maintains a Pollution Incident Response Management Plan (PIRMP) for the site. The PIRMP is available on the Integra UG Public Website and was readily available to all staff and visitors at the time of the audit site inspection. The PRIMP was prepared in accordance with the requirements of section O5 of EPL 3390. The PIRMP is tested annually on site with the last test conducted on 27 February 2020.	Compliant	

		Management Plan in accordance with the requirements in Part 5.7A of the Protection of the Environment Operations (POEO) Act 1997 and POEO regulations.	Evidence: - Site Inspection - PIRMP, INTUG-793190785-47, version 7.0, dated 3 April 2020														
O6 Other operating conditions																	
EPL-33	O6.1	There must be no incineration or open burning of any material(s) on the premises, except as specifically authorised by the EPA.	Integra UG stated that it does not incinerate or conduct open burning on site. No evidence was seen which indicated the site has conducted incineration on site during the audit period.	Compliant													
EPL-34	O6.2	All above-ground tanks containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place.	All above ground tanks sighted during the audit site inspection were adequately bunded. Evidence: Site Inspection	Compliant													
5 MONITORING AND RECORDING CONDITIONS																	
M1 Monitoring records																	
EPL-35	M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	This is noted	Noted													
EPL-36	M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	Monitoring data required by EPL 3390 was verified to be in a legible form and stored within Glencore’s monitoring database. Monitoring data records for the past 4 years (and longer) were sighted as being available. The auditors were informed that no requests had been made by an authorised officer of the EPA for monitoring records to be provided other than those provided with the Annual Returns. Evidence: Integra UG environmental monitoring database	Compliant													
EPL-37	M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Water Quality Monitoring Surface water monitoring records completed by Carbon Based were provided to the auditors. The records contained the required information. Noise Monitoring Noise monitoring reports provided by Umwelt provide the following information: - Time in which monitoring occurred - Date in which monitoring occurred - Location in which monitoring occurred The name of the person who collected the sample is not referenced in the monitoring report. Evidence: - Site Inspection	Not Compliant ADMIN NC	IEA REC 05: Integra UG to ensure that the name of the person who undertook noise monitoring in accordance with the EPL is recorded and can be produced to validate compliance with Condition M1.3 of EPL 3390.												
M2 Requirement to monitor concentration of pollutants discharged																	
EPL-38	M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	Refer evidence against conditions M2.2.	Refer evidence against conditions M2.2													
EPL-39	M2.2	Water and/ or Land Monitoring Requirements POINT 6 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Faecal Coliforms</td><td>colony forming units per 100 millilitres</td><td>Quarterly</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Quarterly</td><td>Grab sample</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling Method	Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample	pH	pH	Quarterly	Grab sample	The Integra quarterly environmental monitoring reports were reviewed by the auditors along with EPL monitoring data collected during the audit period. Quarterly monitoring results for faecal coliforms and pH collected from Point 6 were monitored in accordance with the requirements of Condition M2.2.The sampling method is not outlined on the effluent monitoring results summary.	Compliant	IEA OFI 20: It is recommended the sampling method is documented on the effluent and water
Pollutant	Units of measure	Frequency	Sampling Method														
Faecal Coliforms	colony forming units per 100 millilitres	Quarterly	Grab sample														
pH	pH	Quarterly	Grab sample														

		POINT 8,9,10,11,12,13,14 <table><thead><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr></thead><tbody><tr><td>Electrical conductivity</td><td>microsiemens per centimetre</td><td>Quarterly</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Quarterly</td><td>Grab sample</td></tr><tr><td>Total dissolved solids</td><td>milligrams per litre</td><td>Quarterly</td><td>Grab sample</td></tr><tr><td>Total suspended solids</td><td>milligrams per litre</td><td>Quarterly</td><td>Grab sample</td></tr></tbody></table>	Pollutant	Units of measure	Frequency	Sampling Method	Electrical conductivity	microsiemens per centimetre	Quarterly	Grab sample	pH	pH	Quarterly	Grab sample	Total dissolved solids	milligrams per litre	Quarterly	Grab sample	Total suspended solids	milligrams per litre	Quarterly	Grab sample	Water quality results are published on the Integra UG Public Website. The following results were available: - August 2020 - November 2020 The requirement for Ambient water quality monitoring was added to EPL 3390 in May 2020 following a licence variation issued by the EPA on 26 May 2020. Quarterly monitoring records show monitoring of pollutants is conducted in accordance with Condition M2.2. The sampling method is not outlined on the water quality monitoring results summary. It is noted that water quality results are summarised in the Integra UG Quarterly Environmental Monitoring Reports. Ambient water quality monitoring results at all required EPL points is not summarised in these reports. Reference is made to Monitoring Points 8, 9 and 10 only (GC1, GC2 and GC3 respectively) despite all EPL monitoring points being referenced in the WMP. Discussion with Integra UG E&C Manager outlined that the monitoring points not outlined in the Integra UG quarterly environmental monitoring reports were excluded as theses monitoring point locations were dry or too low to allow samples to be taken. Integra UG noted that the environmental monitoring reports could be updated to reflect sampling points where samples could not be taken. Evidence: - Noise of variation of EPL 3390, EPA Notice Number 1588229, dated 26 May 2020 - Effluent Monitoring data, (audit period) - Water quality monitoring results, (August & November 2020) - Discussion with Integra UG E&C Manager		monitoring results summary IEA OFI 21: It is recommended that the Integra UG Quarterly Environmental Monitoring Reports include a summary of all EPL monitoring points. Where samples cannot be taken due to low water levels this should be outlined in the reports.
Pollutant	Units of measure	Frequency	Sampling Method																						
Electrical conductivity	microsiemens per centimetre	Quarterly	Grab sample																						
pH	pH	Quarterly	Grab sample																						
Total dissolved solids	milligrams per litre	Quarterly	Grab sample																						
Total suspended solids	milligrams per litre	Quarterly	Grab sample																						
M3 Testing methods – concentration limits																									
EPL-40	M3.1	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	Monitoring reports and laboratory records were provided to the auditors for review and verify compliance with Condition M3.1 of the EPL 3390. Evidence: - Water quality monitoring results, (August & November 2020) - ALS Certificate of Analysis Records - Surface Water Monitoring Records, Carbon Based, Dated August 2020	Compliant																					
M4 Recording of pollution complaints																									
EPL-41	M4.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	No complaints were received during the audit period in relation to pollution arising from any activity to which Integra UG’s EPL 3390 applies.	Not Triggered																					
EPL-42	M4.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	No complaints were received during the audit period in relation to pollution arising from any activity to which Integra UG’s EPL 3390 applies.	Not Triggered																					
EPL-43	M4.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	No complaints were received during the audit period in relation to pollution arising from any activity to which Integra UG’s EPL 3390 applies.	Not Triggered																					

EPL-44	M4.4	The record must be produced to any authorised officer of the EPA who asks to see them.	No complaints were received during the audit period in relation to pollution arising from any activity to which Integra UG's EPL 3390 applies.	Not Triggered																	
M5 Telephone complaints line																					
EPL-45	M5.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Integra UG maintain a Community Complaints and Enquiries hotline 24 hours / 7 days a week. The number for the Community Complaints and Enquiries hotline is displayed on the Integra UG Public Website (refer screen shot from Integra UG's Public Website below) and also notified to the public via the mine community newsletters and CCC meetings.  Evidence: - Integra UG Public Website - https://www.glencore.com.au/operations-and-projects/coal/current-operations/integra-underground/community-documents - CCC meeting minutes	Compliant																	
EPL-46	M5.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Refer to evidence against Condition M5.1 of EPL 3390.	Compliant																	
EPL-47	M5.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	This is noted	Noted																	
M6 Noise monitoring																					
EPL-48	M6.1	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. POINT 15,16 <table><tr><th>Assessment period</th><th>Minimum frequency in a reporting period</th><th>Minimum duration within 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> POINT 17,18 <table><tr><th>Assessment period</th><th>Minimum frequency in a reporting period</th><th>Minimum duration within 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 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 assessment period	Minimum number of assessment period	Night	Special Frequency 1	15 minutes	1 operation day	Integra UG engaged Umwelt to conduct attended noise monitoring during the audit period, in accordance with the NMP. Attended noise monitoring is required to be conducted quarterly however, during construction of the infrastructure associated with MOD 8, attended noise monitoring was conducted on a monthly basis. Noise data published in the 2017, 2018 and 2019 Annual Reviews and the Attended Noise Monitoring Reports prepared by acoustic consultant Umwelt concluded the following: 2017: Integra UG's operations were inaudible throughout all monitoring periods. 2018: Integra UG's operations were inaudible throughout all monitoring periods. 2019: Integra UG's operations were inaudible throughout most monitoring periods and below criteria when audible. In May 2020 the EPA updated EPL 3390 to include noise limits at noise monitoring points after reviewing the document titled "Review of EPL Noise Monitoring Points Integra Underground Final March 2020 by Umwelt (Australia) Pty Limited" and has included noise limits at sensitive receivers consistent with consent PA 08_0101 - Mod 8, March 2018. The variation in licence conditions from May 2020 was referenced by Umwelt in the Environmental noise monitoring reports and accounted for in ongoing monitoring. This includes night-time attended noise monitoring being undertaken at monitoring locations NAG1, NAG3, NAG4, NAG5, NAG6, NAG7, NAG8, NAG9 and NAG10 in accordance with the NMP which encompasses the monitoring requirements of EPL 3390.	Compliant	
Assessment period	Minimum frequency in a reporting period	Minimum duration within 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 assessment period	Minimum number of assessment period																		
Night	Special Frequency 1	15 minutes	1 operation day																		

			Attended noise monitoring results from the audit period showed that the Integra UG was compliant with the LAeq,15 minute and the LA1,1minute project specific noise criteria in accordance with the NMP and Project Approval as well as the EPL noise limits, for the meteorological conditions experienced at the time of monitoring at all locations. Evidence: - Noise of variation of licence No. 3390, EPA Notice Number 1588229, dated 26 May 2020 - Environmental Noise Monitoring, Umwelt (2017-220) - Annual Reviews 2017, 2018 & 2019		
EPL-49	M6.2	Special Frequency 1 refers to a requirement to undertake monitoring in accordance with Condition M6.4 b).	This is noted	Noted	
EPL-50	M6.3	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. <i>Definitions</i> Noise refers to 'sound pressure levels' for the purpose of conditions L5.1 to L.5.4 and condition M10.	This is noted and referenced in the Environmental Noise Monitoring reports.	Compliant	
EPL-51	M6.4	To assess compliance with condition L3.1, attended noise monitoring must be undertaken in accordance with Conditions L3.2 to L3.5: a) at the EPA points 15 and 16 identified in P1.4; and 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 c) occur every quarter in a reporting period; and 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.	This is noted and referenced in the Environmental Noise Monitoring reports.	Compliant	
EPL-52	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.	This is noted but was not triggered during the audit period.	Not Triggered	

6 REPORTING CONDITIONS

R1 Annual return documents

EPL-53	R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions, 4. a Statement of Compliance - Load based Fee, 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and 7. a Statement of Compliance - Environmental Management Systems and Practices. At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	The auditors sighted the following Annual Returns which were required to be submitted during the audit period. 2017-18 Annual Return 2018-19 Annual Return 2019-20 Annual Return The auditors reviewed the Annual Returns and confirmed they contained the required content. Evidence: 2017-18 Annual Return 2018-19 Annual Return 2019-20 Annual Return	Compliant	
EPL-54	R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	Refer to evidence against Condition R1.1	Refer evidence against Condition R1.1	

EPL-55	R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period. Note: An application to transfer a licence must be made in the approved form for this purpose.	This condition was not triggered during the audit period.	Not Triggered	
EPL-56	R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	This condition was not triggered during the audit period.	Not Triggered	
EPL-57	R1.5	The Annual Return for the reporting period must be supplied to the EPA via eConnect <i>EPA</i> or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	The Integra UG Annual Returns are required to be submitted to the EPA before the 30 November each year. Submission dates for the Annual Returns submitted during the audit period include: 2017-18 Annual Return, 29 October 2018 2018-19 Annual Return, 16 October 20219 2019-20 Annual Return, 27 October 2020 Evidence: 2017-18 Annual Return submission via eConnect on 29 October 2018 2018-19 Annual Return submission via eConnect on 16 October 2019 2019-20 Annual Return submission via eConnect on 27 October 2020	Compliant	
EPL-58	R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	All Annual Returns submitted by Integra UG were available on the Integra UG server.	Compliant	
EPL-59	R1.7	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Signed copies of the Annual Returns were sighted by the auditors. The Annual Returns are authorised by the Director of Underground Operations Glencore Coal Assets Australia (GCAA) and Financial Controller. Evidence: 2017-18 Annual Return 2018-19 Annual Return 2019-20 Annual Return	Compliant	

R2 Notification of environmental harm

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

EPL-60	R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	This condition was not triggered during the audit period.	Not Triggered	
EPL-61	R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.	This condition was not triggered during the audit period.	Not Triggered	

R3 Written report

EPL-62	R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,	This condition was not triggered during the audit period.	Not Triggered	
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		and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.			
EPL-63	R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	This condition was not triggered during the audit period.	Not Triggered	
EPL-64	R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	This condition was not triggered during the audit period.	Not Triggered	
EPL-65	R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	This condition was not triggered during the audit period.	Not Triggered	
R4 Other notifications					
EPL-66	R4.1	Notification of Pollution of Waters The Licensee must notify the EPA by telephoning the Environment Line service on 131 555 immediately after the Licensee becomes aware of any contravention or potential contravention of Condition L1 of the Licence.	This has not been triggered during the audit period	Not Triggered	
EPL-67	R4.2	The Licensee must provide written details of the notification to the EPA Director Hunter at hunter.region@epa.nsw.gov.au within 7 days of the date of the notification.	This condition was not triggered during the audit period.	Not Triggered	
EPL-68	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 know to the licensee or to one of the licensee's employees or agents	This condition was not triggered during the audit period.	Not Triggered	
R5 Other reporting conditions					
EPL-69	R5.1	Sewage Treatment System Report The sewage treatment system maintenance program required by Condition O2.4 must be submitted annually to the EPA with the Annual Return.	Integra UG provide a copy of the quarterly maintenance reports prepared for the sewage treatment plant to the EPA along with submission of the Annual Return. Evidence: - Quarterly maintenance reports, Garden Master Hunter Pty Limited - Annual Report submissions	Compliant	
EPL-70	R5.2	The licensee must retain a copy of each report required by Condition O2.3 for 3 years from the date each record is made.	Records of inspections conducted on the sewage treatment system, as required by Condition O2.3, were available from 2017 – 2020. Evidence: Quarterly maintenance reports, Garden Master Hunter Pty Limited 2017-2020	Compliant	

EPL-71	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.	A variation of EPL 3390 by the EPA occurred on 26 May 2020. The variation included the additional of Condition R5.3 to provide a noise compliance assessment report to the EPA along with submission of the Annual Return. The Annual Noise Compliance Assessment Report was provided to the EPA along with submission of the 2019-2020 Annual Return. The report was prepared by external acoustic consultant Umwelt. Specifically, external consultants Amanda Buckeridge and Rod Williams from Umwelt completed the report. CVs showing adequate qualifications held were reviewed by the auditors. Table 1 of the Annual Noise Compliance Assessment Report provides a compliance statement of the attended noise monitoring results for each quarterly monitoring report. The report concluded that the attended noise monitoring program results showed that the Integra UG was compliant with the LAeq,15 minute and the LA1,1minute noise criteria for each monitoring period, for the meteorological conditions experienced at the time of monitoring. Evidence: - Annual Noise Compliance Assessment Report, prepared by Umwelt, dated 28 September 2020 - Amanda Buckeridge 'Senior Acoustician' CV - Rod Williams 'Senior Environmental Scientist' CV	Compliant	
EPL-72	R5.4	Water Quality Monitoring Report The licensee must provide the EPA with its Annual Return an annual water quality monitoring report prepared by an appropriately qualified and experienced person that includes the following:	A variation of EPL 3390 by the EPA occurred on 26 May 2020. The variation included the additional of Condition R5.4 to provide a water quality monitoring report to the EPA along with submission of the Annual Return. The Surface Water 2019-2020 Annual Return Report was provided to the EPA along with submission of the 2019-2020 Annual Return. The report was prepared by the Glencore Graduate Environment and Community Officer and reviewed / authorised by the Integra UG E&C Manager. Evidence: Surface Water 2019-2020 Annual Return Report, INTUG-793190785-3105, version 1.0, dated 26 October 2020	Compliant	
EPL-73	R5.4a	a) for the monitoring required by the licence during the reporting period to which the Annual Return relates: (i) a summary of results for all ambient water quality monitoring required by the licence in table form and graphical form; (ii) total daily rainfall records from the premises meteorological monitoring required by the licence on the day that the sampling was undertaken in table form; (iii) total daily continuous rainfall records in graphical form; and (iv) a plan with the monitoring locations.	The Surface Water 2019-2020 Annual Return Report includes the following - A summary of results for all the ambient water quality monitoring required by the licence for the period of the Annual Return (Table 2-1) - The total daily rainfall on the day the sampling was undertaken (Section 2.1.2) - Total daily continuous rainfall for the monitoring periods in the reporting period (Section 2.1.3) - A plan outlining the water quality monitoring locations (figure 2-15) - Monitoring trends are outlined in Section 2.2 Evidence: - Surface Water 2019-2020 Annual Return Report, INTUG-793190785-3105, version 1.0, dated 26 October 2020	Compliant	
EPL-74	R5.4b	b) A graphical presentation of the trends of monitoring results required by the licence for the reporting period to which the Annual Return relates and the proceeding data for the period of record the licensee has monitoring results for the licensed location.	Graphical presentation of the monitoring results for pH, electrical conductivity, total suspended solids and total dissolved solids for the Annual Return reporting period is provided at Sections 2.1.1.1 – 2.1.1.3 of the Surface Water 2019-2020 Annual Return Report Evidence:	Compliant	

			Surface Water 2019-2020 Annual Return Report, INTUG-793190785-3105, version 1.0, dated 26 October 2020		
EPL-75	R5.4c	c) A graphical representation of total daily continuous rainfall records required by the licence for the record that matches the ambient water quality results, if available.	Graphical representation of the total daily rainfall and ambient monitoring is provided in Section 2.3 of the Surface Water 2019-2020 Annual Return Report Evidence: Surface Water 2019-2020 Annual Return Report, INTUG-793190785-3105, version 1.0, dated 26 October 2020	Compliant	

7 GENERAL CONDITIONS

G1 Copy of licence kept at the premises or plant

EPL-76	G1.1	A copy of this licence must be kept at the premises to which the licence applies.	A link to EPL 3390 is included on the Integra UG Public Website. An electronic copy of EPL 3390 is available on Integra UG's internal intranet.	Compliant	
EPL-77	G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	The Licence is available however no requests had been made during the audit period.	Compliant	
EPL-78	G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	EPL 3390 is available for inspection by employees via the website, Integra UG internal intranet or through the Integra UG E&C department.	Compliant	

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Audit Checklist – Mining Leases

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Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
Notice to Landholders					
ML-1	ML1525 ML1551 ML1676 ML1437 ML1518 ML1786 ML1742 ML1740 CL382 1a	Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.	This condition pre-dates the audit period and was therefore not triggered. Expiry dates for the leases in place are outlined below: - ML1525 – 17 November 2023 - ML1551 – 27 March 2032 - ML1676 – 04 January 2026 - ML1437 – 27 March 2032 - ML1518 – 27 March 2032 - ML1786 – 31 December 2031 - ML1742 – 22 October 2034 - ML1740 – 20 December 2023 - CL382 – 11 November 2033	Not Triggered	
ML-2	ML1525 ML1551 ML1676 ML1437 ML1518 ML1786 ML1742 ML1740 CL382 1b	If there are ten or more landholders, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.	This condition pre-dates the audit period and was therefore not triggered.	Not Triggered	
Rehabilitation					
ML-3	ML1525 ML1551 ML1676 ML1437 ML1518 ML1786 ML1742 ML1740 CL382 2	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	A review of subsidence monitoring data collected during the audit period indicated that the main subsidence impacts observed from the mining of Longwall 14 are minor cracking of the surface, generally within the panel footprint, and areas of minor ponding. Minor impacts to the Mount Owen Railway Line, Bettys Creek bridges and associated infrastructure occurred which were consistent with expectations and less than the maxima forecast specified in the projects' environmental assessments. The observed subsidence impacts are consistent with those predicted in the Subsidence Impact Assessment Reports prepared for the project and as outlined in the relevant sections of the Integra UG Extraction Plans. Integra UG informed the auditors that only one surface crack was observed during the audit period which required remediation works in the form of sand and soil to be placed in the crack. Integra have in place a Progressive Rehabilitation of Gas Wells and Surface Infrastructure Procedure which has been developed to track progressive rehabilitation of gas wells and other surface gas drainage infrastructure to minimise the rehabilitation required after closure of the mine . Rehabilitation of gas wells and surface gas drainage infrastructure is undertaken progressively throughout the mine life to minimise rehabilitation that is required after closure of the mine. The auditors sighted evidence of gas wells and other surface infrastructure which had been progressively rehabilitated throughout the audit period. This included the following: Rehabilitation of disturbed surface areas at the vent shaft 3 site which was constructed during the audit period following approval of modification 8 of PA 08_0101.	Compliant	

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Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- Rehabilitation of Gaswell site 13-3. Rehabilitation of this gaswell site commenced in February 2020. The auditors sighted the approved GDP for the rehabilitation works. - Rehabilitation of Bettys Creek which included compensatory planting of <i>Casuarina glauca</i> in the riparian zone following the construction of the water transfer pipeline approved under modification 7 of PA 08_0101. Additional review on rehabilitation of surface disturbances caused by Integra UGs operations is provided in the PA 08_0101 checklist. Evidence: - Subsidence Monitoring Reports – Bi-monthly, SCT (audit period) - Weekly subsidence inspection checklist, (audit period) 2020 IEA Subsidence Specialist Findings - Site Inspection - Progressive Rehabilitation of Gas Wells and Surface Infrastructure (INTUG-793190785-1189), version 10.0, dated 8 October 2020 - GDP 13-3 Rehabilitation, dated 25 February 2020 - Integra UG 2019 Annual Rehabilitation Monitoring Report, Umwelt, 14 October 2019 - Integra UG 2018 Annual Rehabilitation Monitoring Report, Umwelt, 22 February 2019 - Annual Reviews 2017, 2018 & 2019		
Mining Operations Plan and Annual Rehabilitation Report					
ML-4	ML1525 ML1551 ML1676 ML1437 ML1518 ML1786 ML1742 ML1740 CL382 3a	The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	Following approval for recommencement of operations in 2017 Integra prepared and submitted to the Resource Regulator (RR) a MOP which covered the period of 01 January 2017 to 31 December 2018. RR approved this MOP on 30 November 2016. A new MOP was prepared in 2018 which covered the period 01 November 2018 to 31 December 2023. The MOP was submitted to the RR in November 2018 following the approval of modification 8 to PA 08_0101 and approved on 19 November 2018. The 2018-2023 MOP was amended in 2018 and resubmitted to the RR for approval as MOP Amendment A (Version 1). The RR issued a 'Notice of Refusal' letter in regards to MOP Amendment A (Version 1) on 08 April 2019. The RR requested a number of changes and additional information be provided, this is outlined in detail in Section 1.1.5 of the MOP. Integra resubmitted the MOP Amendment a (Version 2) to the RR which was subsequently approved by the RR on 31 May 2019. Administrative changes were made to the MOP in 2020 resulting in MOP Amendment B being issued to the RR for approval. The latest revision of the MOP, MOP Amendment B, was approved by RR on 30 June 2020. Evidence: - MOP Amendment B - Integra UG 2019 Annual Rehabilitation Monitoring Report, Umwelt, 14 October 2019 - Integra UG 2018 Annual Rehabilitation Monitoring Report, Umwelt, 22 February 2019 - Annual Reviews 2017, 2018 & 2019 - Site Inspection	Compliant	

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Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
ML-5	ML1525 ML1551 ML1676 ML1437 ML1518 ML1786 ML1742 ML1740 CL382 3b	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: (i) identifies areas that will be disturbed; (ii) details the staging of specific mining operations, mining purposes and prospecting; (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use; (iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and (v) reflects the conditions of approval under: • the Environmental Planning and Assessment Act 1979; • the Protection of the Environment Operations Act 1997; • any other approvals relevant to the development including the conditions of this mining lease.	The MOP includes the following: - The Plans provided in the Appendix of the MOP provide a series of plans which show the annual sequence of mining and rehabilitation activities over the MOP term. Total predicted disturbance area is also summarised in Table 7-2 of the MOP - MOP Section 2.0 outlines the proposed mining activities in detail. This section is complimented by the MOP Plan 3A – 3E-2. - Plan 4 outlines the plan for Final rehabilitation and post mining land use. Section 5 outlines the rehabilitation planning and management for each domain. Section 7 outlines how rehabilitation will be implemented. - Specific control measures to be implemented to manage risks of environmental harm are outlined throughout the MOP document. - Section 1.2 discusses the Project Approval, EPL and other licences	Compliant	
ML-6	ML1525 ML1551 ML1676 ML1437 ML1518 ML1786 ML1742 ML1740 CL382 3c	The MOP must be prepared in accordance with the <i>ESG3: Mining Operations Plan (MOP) Guidelines September 2013</i> published on the Department's website at www.resources.nsw.gov.au/environment	Table 1-2 of the MOP states that it was prepared in accordance with the <i>DRE Guidelines ESG3: Mining Operations Plan (MOP) Guidelines. September 2013</i> . A detailed assessment of the MOP against the Guideline was not undertaken.	Compliant	
ML-7	ML1525 ML1551 ML1676 ML1437 ML1518 ML1786 ML1742 ML1740 CL382 3d	The lease holder may apply to the Minister to amend an approved MOP at any time.	Refer to evidence against Condition Reference No. ML-4 / 3a	Compliant	
ML-8	ML1525 ML1551 ML1676 ML1437 ML1518 ML1786 ML1742 ML1740 CL382 3e	It is not a breach of this condition if: (i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the <i>Environmental Planning and Assessment Act 1979</i> , the <i>Protection of the Environment Operations Act 1997</i> , the <i>Mine Health and Safety Act 2004 / Coal Mine Health and Safety Act 2002</i> and <i>Mine Health and Safety Regulation 2007 / Coal Mine Health and Safety Regulation 2006</i> or the <i>Work Health and Safety Act 2011</i> ; and (ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.	This is noted.	Noted	
ML-9	ML1525 ML1551 ML1676 ML1437 ML1518 ML1786 ML1742 ML1740 CL382 3f	The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resources.nsw.gov.au/environment .	Rehabilitation monitoring reports are prepared annually by external consultant Umwelt. A summary of the findings from these reports is provided in Section 8 of the Annual Review which are submitted to the Minister to satisfy the requirements of this condition. Evidence of Integra Ug submitting the Annual Review to RR was provided to the auditors. In summary: - The 2019 Annual Review was submitted to RR on 31 March 2020 - The 2018 Annual Review was submitted to RR on 29 March 2020 - The 2017 Annual Review was submitted to RR on 29 March 2018	Compliant	

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Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
		<i>Note: The Rehabilitation Report replaces the Annual Environmental Management Report.</i>	Evidence: - Email to RR regarding submission of the 2017 Annual Review, dated 29 March 2018 - Email to RR regarding submission of the 2018 Annual Review, dated 29 March 2019 - Email to RR regarding submission of the 2019 Annual Review, dated 31 March 2020		
Non-Compliance Reporting					
ML-10	ML1786 ML1742 ML1740 4a	The lease holder must notify the Department upon becoming aware of any breaches of the conditions of this mining lease or breaches of the Mining Act 1992 or Mining Regulation 2016;	This had not occurred during the audit period and as such this condition was not triggered	Not Triggered	
ML-11	ML1786 ML1742 ML1740 4b	Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.	This had not occurred during the audit period and as such this condition was not triggered	Not Triggered	
Compliance Report					
ML-12	ML1525 ML1551 ML1676 ML1437 ML1518 CL382 4a	The lease holder must submit a Compliance Report to the satisfaction of the Minister. The report must be prepared in accordance with any relevant guidelines or requirements published by the Minister for compliance reporting.	The Integra UG Annual Reviews are submitted to the Minister to satisfy the requirement for a Compliance Report. Refer evidence against Condition 3f (ML-9).	Compliant	
ML-13	ML1525 ML1551 ML1676 ML1437 ML1518 CL382 4b	The Compliance Report must include: (i) the extent to which the conditions of this mining lease or any provisions of the Act or the regulations applicable to activities under this mining lease, have or have not been complied with; (ii) particulars of any non-compliance with any such conditions or provisions, (iii) the reasons for any such non-compliance; (iv) any action taken, or to be taken, to prevent any recurrence, or to mitigate the effects, of that non-compliance.	The 2017, 2018 and 2019 Annual Reviews contained the required information as outlined in Condition 4b.	Compliant	
ML-14	ML1525 ML1551 ML1676 ML1437 ML1518 CL382 4c	The Compliance Report must be lodged with the Department annually on the grant anniversary date for the life of this mining lease.	The submission date for the Annal Rehabilitation Report and Compliance Report was consolidated to be aligned with the reporting period and submission deadline required by the Annual Review (01 January – 31 December each year and submitted by 31 March each year). This was confirmed in a letter provided by the Department-DRG on 04 July 2017. The Annual Reviews were submitted on the following dates: 2019 Annual Review - Integra UG submitted the 2019 Annual Review to the Department of Planning Infrastructure and Environment (the Department) on 31 March 2020 2018 Annual Review - Integra UG submitted the 2018 Annual Review to the Department on 29 March 2019 2017 Annual Review - Integra UG submitted the 2017 Annual Review to the Department on 29 March 2018	Compliant	

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Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			Evidence: - Letter from the Department-DRG, 'Application to amend date of annual rehabilitation report', dated 04 July 2017 - Refer evidence against Condition 3f (ML-9).		
ML-15	ML1525 ML1551 ML1676 ML1437 ML1518 CL382 4d	In addition to annual lodgement under condition 4(c) above, a Compliance Report: (i) must accompany any application to renew this mining lease under the Act; (ii) must accompany any application to transfer this mining lease under the Act; and (iii) must accompany any application to cancel, or to partially cancel, this mining lease under the Act.	This condition was not triggered during the audit period.	Not Triggered	
ML-16	ML1525 ML1551 ML1676 ML1437 ML1518 CL382 4e	Despite the submission of any Compliance Report under (c) or (d) above, the titleholder must lodge a Compliance Report with the Department at any date or dates otherwise required by the Minister.	This condition was not triggered during the audit period.	Not Triggered	
ML-17	ML1525 ML1551 ML1676 ML1437 ML1518 CL382 4f	A Compliance Report must be submitted one month prior to the expiry of this mining lease, where the licence holder is not seeking to renew or cancel this mining lease.	This condition was not triggered during the audit period.	Not Triggered	

Environmental Incident Report

ML-18	ML1786 ML1742 ML1740 5	The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.	Evidence reviewed as part of the IEA, as referenced against the PA 08_0101 checklist, as well as verbal communications conducted with Integra UG personnel indicate that no environmental incident report was required to be submitted. No reportable incidents or breaches of legislation occurred during the audit period.	Not Triggered	
ML-19	ML1525 ML1551 ML1676 ML1437 ML1518 CL382 5a	The lease holder must notify the Department of all: (i) breaches of the conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and (ii) breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the <i>Protection of the Environment Operations Act 1997</i>), arising in connection with significant surface disturbing activities, including mining operations, mining purposes and prospecting operations, under this mining lease. The notification must be given immediately after the lease holder becomes aware of the breach. <i>Note. Refer to www.resources.nsw.gov.au/environment for notification contact details.</i>	Evidence reviewed as part of the IEA, as referenced against the PA 08_0101 checklist, as well as verbal communications conducted with Integra UG personnel indicate that no environmental incident report was required to be submitted. No reportable incidents or breaches of legislation occurred during the audit period.	Not Triggered	
ML-20	ML1525 ML1551 ML1676 ML1437 ML1518 CL382 5b	The lease holder must submit an Environmental Incident Report to the Department within seven (7) days of all breaches referred to in condition 5(a)(i) and (ii). The Environmental Incident Report must include: (i) the details of the mining lease; (ii) contact details for the lease holder; (iii) a map identifying the location of the incident and where material harm to the environment has or is likely to occur; (iv) a description of the nature of the incident or breach, likely causes and consequences; (v) a timetable showing actions taken or planned to address the incident and to prevent future incidents or breaches referred to in 5(a). (vi) a summary of all previous incidents or breaches which have occurred in the previous 12 months relating to significant surface disturbing activities, including	Evidence reviewed as part of the IEA, as referenced against the PA 08_0101 checklist, as well as verbal communications conducted with Integra UG personnel indicate that no environmental incident report was required to be submitted. No reportable incidents or breaches of legislation occurred during the audit period.	Not Triggered	

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Ref No.	Cond. No	Condition	Comments and Evidence		Finding	Recommendation														
		mining operations, mining purposes and prospecting operations under this mining lease. <i>Note. The lease holder should have regard to any relevant Director General's guidelines in the preparation of an Environmental Incident Report. Refer to www.resources.nsw.gov.au/environment for further details.</i>																		
ML-21	ML1525 ML1551 ML1676 ML1437 ML1518 CL382 5c	In addition to the requirements set out in conditions 5(a) and (b), the lease holder must immediately advise the Department of any notification made under section 148 of the <i>Protection of the Environment Operations Act 1997</i> arising in connection with significant surface disturbing activities including mining operations, mining purposes and prospecting operations, under this mining lease.	Evidence reviewed as part of the IEA, as referenced against the PA 08_0101 checklist, as well as verbal communications conducted with Integra UG personnel indicate that no environmental incident report was required to be submitted. No reportable incidents or breaches of legislation occurred during the audit period.		Not Triggered															
Extraction Plan																				
ML-22	ML1551 ML1437 ML1518 ML1789 ML1742 ML1740 CL382 6a	In this condition: (i) approved Extraction Plan means a plan, being: A. an extraction plan or subsidence management plan approved in accordance with the conditions of a relevant development consent and provided to the Secretary; or B. a subsidence management plan relating to the mining operations subject to this lease: I. submitted to the Secretary on or before 31 December 2014; and II. approved by the Secretary. (ii) relevant development consent means a development consent or project approval issued under the Environmental Planning & Assessment Act 1979 relating to the mining operations subject to this lease.	Integra UG LW13&14 Extraction Plan was conditionally approved by the Department on 06 April 2017 prior to secondary extraction of Longwall 13 commencing on 23 May 2017. The Department formally approved the updated Integra UG LW13&14 Extraction Plan on 11 August 2017. Integra UG LW15&16 Extraction Plan was formally approved by the Department on 16 August 2019 with secondary extraction of Longwall 15 commencing production on 19 September 2019. Evidence: - Letter from the Department 'Extraction Plan Longwalls 13-14 – Approval', dated 11 August 2017 - Letter from the Department 'Extraction Plan – Longwalls 15 and 16', dated 16 August 2019		Compliant															
ML-23	ML1551 ML1437 ML1518 ML1789 ML1742 ML1740 CL382 6b	The lease holder must not undertake any underground mining operations that may cause subsidence except in accordance with an approved Extraction Plan.	Mining operations are summarised in the bi-monthly subsidence monitoring reports prepared by external consultant SCT. No evidence of mining activities occurring not in accordance with the approved extraction plans was identified.		Compliant															
ML-24	ML1551 ML1437 ML1518 ML1789 ML1742 ML1740 CL382 6c	The lease holder must ensure that the approved Extraction Plan provides for the effective management of risks associated with any subsidence resulting from mining operations carried out under this lease.	The management of subsidence risks is outlined in the series of Sub-Management Plans and Programs which have been prepared under each Extraction Plan, as outlined in the table below. A review of the implementation of the extraction plans and associated sub plans was conducted by the audit subsidence specialist and is summarised in the Subsidence Specialist Report. <table><tr><th>Extraction Plan - Longwalls 15-16</th><th>Extraction Plan - Longwalls 13-14</th></tr><tr><td>Coal Resource Recovery Plan</td><td>Coal Resource Recovery Plan</td></tr><tr><td>Subsidence Monitoring Program</td><td>Subsidence Monitoring Program</td></tr><tr><td>Public Safety Management Plan</td><td>Public Safety Management Plan</td></tr><tr><td>Land Management Plan</td><td>Land Management Plan</td></tr><tr><td>Built Features Management Plan, inclusive of:</td><td>Built Features Management Plan, inclusive of:</td></tr><tr><td>Mount Owen Railway and Bettys Creek Bridges Asset Management Plan;</td><td>Mount Owen Railway and Bettys Creek Bridges Asset Management Plan;</td></tr></table>		Extraction Plan - Longwalls 15-16	Extraction Plan - Longwalls 13-14	Coal Resource Recovery Plan	Coal Resource Recovery Plan	Subsidence Monitoring Program	Subsidence Monitoring Program	Public Safety Management Plan	Public Safety Management Plan	Land Management Plan	Land Management Plan	Built Features Management Plan, inclusive of:	Built Features Management Plan, inclusive of:	Mount Owen Railway and Bettys Creek Bridges Asset Management Plan;	Mount Owen Railway and Bettys Creek Bridges Asset Management Plan;	Compliant	
Extraction Plan - Longwalls 15-16	Extraction Plan - Longwalls 13-14																			
Coal Resource Recovery Plan	Coal Resource Recovery Plan																			
Subsidence Monitoring Program	Subsidence Monitoring Program																			
Public Safety Management Plan	Public Safety Management Plan																			
Land Management Plan	Land Management Plan																			
Built Features Management Plan, inclusive of:	Built Features Management Plan, inclusive of:																			
Mount Owen Railway and Bettys Creek Bridges Asset Management Plan;	Mount Owen Railway and Bettys Creek Bridges Asset Management Plan;																			

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Ref No.	Cond. No	Condition	Comments and Evidence		Finding	Recommendation
			Mount Owen Mine Key Features - Asset Management Plan	Eastern Rail Pit Asset Management Plan		
			Subsidence Management Protocol	Mount Owen TP2 Asset Management Plan		
				Bettys Creek Diversion Asset Management Plan		
ML-25	ML1551 ML1740 ML1437 ML1518 ML1789 ML1742 CL382 6d	The lease holder must notify the Secretary within 48 hours of any: (i) incident caused by subsidence which has a potential to expose any person to health and safety risks; (ii) significant deviation from the predicted nature, magnitude, distribution, timing and duration of subsidence effects, and of the potential impacts and consequences of those deviations on built features and the health and safety of any person; or (iii) significant failure or malfunction of a monitoring device or risk control measure set out in the approved Extraction Plan addressing: A. built features; B. public safety; or C. subsidence monitoring.	This condition was not triggered during the audit period.		Not Triggered	
Resource Recovery						
ML-26	ML1551 ML1437 ML1518 ML1789 ML1742 ML1740 CL382 7	The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	A Coal Resource Recovery Plan (CCRP) is available at Volume 1, Appendix B of the LW15&16 Extraction Plan. The implementation of the CCRP is assessed through review of the Subsidence Monitoring Programs, Built Features Management Plan, specific asset management plans and environmental management plans. No significant issues were identified with regards to the implementation of these plans, refer to the Subsidence specialist’s report.		Compliant	
ML-27	CL382 7B	Any proposed activity from time to time in regard to methane drainage and capture should be advised to the Department’s Mine Safety Operations and Environment Units for consideration. Such activities may be subject to conditions relative to each site specific case.	Goaf generated methane management is outlined in the MOP and approved Extraction Plans. Methane Gas is collected where possible and directed to EDL Power Station. Gas can also be discharged at the Flare site on Forest Road or through direct mine ventilation. There was no activity that required notification to the Department during the audit period.		Not Triggered	
Group Security						
ML-28	ML1525 ML1551 ML1676 ML1437 ML1518 ML1789 ML1742 ML1740 CL382 8	The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future. The amount of the security deposit to be provided has been assessed by the Minister at \$10,804,000 . The leases covered by the group security include: Coal Lease 382 (Act 1973) and Mining Leases 1437, 1518, 1525, 1551 and 1676 (Act 1992) .	The auditors sighted a deed of security signed in 2017 which authorised the security deposit of \$8,885,000.00. This was validated in the 2017 IEA report. In February 2019 an additional bond was committed to for an amount of \$1,912,000.00. In September 2019 an additional bond was entered committed for an amount of \$193,000.00 The total security deed committed by Integra UG is therefore \$10,990,000.00. Evidence: - Deed of Security Deposit Bond, Liberty International Underwriters, dated 13 April 2017 - Deed of Security Deposit Bond, Ref 101802/2019, dated 23 September 2019 - Deed of Security, Deutsche Bank, Ref 802/GTE/7880, dated 25 February 2019		Compliant	
Cooperation Agreement						
ML-29	ML1525 ML1551 ML1676	The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holder(s)	Integra UG maintains consistent communication with neighbouring mines.		Compliant	

D R A F T

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
	ML1437 ML1518 ML1789 ML1742 ML1740 CL382 9	of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as: • access arrangements • operational interaction procedures • dispute resolution • information exchange • well location • timing of drilling • potential resource extraction conflicts; and • rehabilitation issues.	Quarterly inter-mine meetings are held between Integra UG, MOC, Ashton, Rix's Creek and Wambo mines. In addition, Integra UG conducted routine communication with MOC, which is also owned by Glencore. Evidence of meeting minutes were sighted by the auditors and verify the required topics are discussed. Evidence: • Inter-Mine Meeting minutes, dated 28 September 2020		
Prescribed Dam					
ML-30	CL382 10a	Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Mt Owen Rail Loop Tailings Dam and Glennies Creek Colliery Pit Water Dam (also known as Possum Skin Dam) without the prior written approval of the Minister and subject to any conditions stipulated.	Possum Skin Dam is part of the Rix's Creek open Cut Mine and is not under the management of Integra UG. Mining conducted during the audit period was not within the notification area for this prescribed dam. The Dam Safety Committee (DSC) Mount Owen Notification Area that surrounds the prescribed/declared dam referred to as Mount Owen Rail Loop Tailings Dam (TP1) extends over part of LW 15 and almost all of LW 16. The IUG Longwalls 15-16 Extraction Plan states that <i>DSC consent and Chief Inspector of Coal Mines (CICM) approval are expected to be required for the mining of both development roadways and longwall extraction within the Mount Owen Notification Area while ever TP1 remains as a prescribed/declared dam.</i> Consent to mine within the Mount Owen Notification Area was obtained from the relevant authorities, evidence has been referenced below.	Compliant	
ML-31	ML1742 ML1740 10a	Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Mount Owen Rail Loop Tailings Dam without the prior written approval of the Minister and subject to any conditions the Minister may stipulate.			
ML-32	ML1551 ML1437 ML1518 ML1789 10a	Notwithstanding any Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Glennies Creek Colliery Pit Water Dam (also known as Possum Skin Dam) without the prior written approval of the Minister and subject to any conditions stipulated.	Evidence: • Letter from RR approving extraction within Mt Owen Notification Area; INTEGRA-1, dated 05 March 2018 • DSC approval to mine within the notification area of the Mount Owen Rail Loop Tailings Dam, dated 16 January 2019 • Letter from RR approving extraction within Mt Owen Notification Area; INTEGRA-2, dated 18 January 2019 • Letter from Chief Inspection of Mines NSW DSC, approval to conduct work within the Mt Owen Notification Area Integra-3, dated 28 June 2019 • Letter from Chief Inspection of Mines NSW DSC, approval to conduct work within the Mt Owen Notification Area Integra-4, dated 26 August 2019 • Letter from Chief Inspection of Mines NSW DSC, approval to conduct work within the Mt Owen Notification Area Integra-6, dated 04 May 202		
ML-33	ML1551 ML1437 ML1518 ML1789 ML1742 ML1740 CL382 10b	Where the lease holder desires to mine within the notification area he or she must: (i) at least twelve (12) months before mining is to commence or such lesser time as the Minister may permit, notify the Minister of the desire to do so. A plan of the mining system to be implemented must accompany the notice; and (ii) provide such information as the Minister may direct.	Adequate evidence was provided by Integra UG to validate compliance with this condition. Refer evidence against Condition against Condition 10a (ML-32).	Compliant	
ML-34	ML1551 ML1437 ML1518 ML1789 ML1742 ML1740	The Minister must not, except in the circumstances set out in sub-paragraph (ii), grant approval unless sub-paragraph (i) of this paragraph has been complied with. This sub-paragraph is complied with if: (i) the Dams Safety Committee as constituted by Section 7 of the Dams Safety Act 1978 Section 6 of the Dams Safety Act 2015 and the owner of the dam have been notified in writing of the desire to mine referred to in paragraph (b).	Adequate evidence was provided by Integra UG to validate compliance with this condition. Refer evidence against Condition against Condition 10a (ML-32).	Compliant	

D R A F T

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
	CL382 10c	(ii) the notifications referred to in clause (a) are accompanied by a description or plan of the area to be mined. (iii) the Director-General/Secretary has complied with any reasonable request made by the Dams Safety NSW Committee or the owner of the dam for further information in connection with the mining proposal. (iv) the Dams Safety NSW Committee has made its recommendations concerning the mining proposal or has informed the Minister in writing that it does not propose to make any such recommendations; and (v) where the Dams Safety NSW Committee has made recommendations the approval is in terms that are: - in accordance with those recommendations; or - where the Minister does not accept those recommendations or any of them - in accordance with a determination under sub-paragraph (ii) of this paragraph. (vi) Where the Minister does not accept the recommendations of the Dams Safety NSW Committee or where the Dams Safety NSW Committee has failed to make any recommendations and has not informed the Minister in writing that it does not propose to make any recommendations, the approval shall be in terms that are, in relation to matters dealing with the safety of the dam: - as determined by agreement between the Minister and the Minister administering the <i>Dams Safety Act 2015</i> 1978; or - in the event of failure to reach such agreement - as determined by the Premier.			
ML-35	ML1551 ML1437 ML1518 ML1789 ML1742 CL382 10d	The Minister, on notice from the Dams Safety NSW Committee, may at any time or times: (i) cancel any approval given where a notice pursuant to Section 18 of the <i>Dams Safety Act 2015</i> 1978 is given. (ii) suspend for a period of time, alter, omit from or add to any approval given or conditions imposed.	This condition was not triggered during the audit period.	Not Triggered	
Petroleum					
ML-36	CL382 11	Any proposed activity from time to time in regard to methane drainage and capture should be advised to the Department's Mine Safety Operations and Environmental Sustainability Units for consideration. Such activities may be subject to conditions relative to each site specific case.	Refer to evidence against Condition No. ML-27.	Compliant	
Reserve					
ML-37	CL382 12	The lease holder shall as far as may be practicable conduct operations so as not to interfere in any way with the public use and enjoyment of Water and Camping Reserve No.65724.	Integra UG operations do not impact the Water and Camping Reserve No. 65724	Compliant	
Exploration Reporting					
ML-38	ML1525 ML1551 ML1676 ML1437 ML1518 ML1789 Note	Exploration Reporting Note: Exploration Reports (Geological and Geophysical) The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 57 of the Mining Regulation 2010. Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales (Department of Trade and Investment; Regional Infrastructure and Services 2010).	Exploration reports are prepared annually and submitted to the Minister in accordance with 163C of the Mining Act 1992 and in accordance with clause 57 of the Mining Regulation 2010. The following was sighted by the auditors: 2018 - Annual Exploration Report CL382 12 November 2017 – 11 November 2018, dated December 2018. Submitted to DRG on 12 December 2018 - Annual Exploration Report ML1437 29 April 2017 – 28 April 2018, dated May 2018. Submitted to DRG on 04 May 2018 2019 - On 2 July 2019 the Secretary of the Department of Planning, Industry and Environment approved the addition of ML1786 and CL382 to the ML1437 Group Geoscientific Report. This approval reclassified the annual report date for CL382 and ML1786 to the 28 May. The group report was therefore updated include ML1518, ML1525, ML1551, ML1676, ML1786 and CL382.	Compliant	

DRAFT

Ref No.	Cond. No	Condition	Comments and Evidence	Finding	Recommendation
			- Annual Exploration Report CL382 12 November 2018 – 11 November 2019, dated December 2019. Submitted on 02 December 2019 - Annual Exploration Report ML1437 29 April 2018 – 28 April 2019, dated May 2019. Submitted to DRG on 04 May 2019 2020 - Annual Exploration Report ML1437 29 April 2019 – 28 April 2020, dated May 2020. Submitted as Version 2 following request for updates to DRG on 05 September 2020. Evidence: - Annual Exploration Report CL382 12 November 2017 – 11 November 2018, dated December 2018 - Email from Integra to DRG submitting the 2017-2018 Exploration Report CL382, dated 12 December 2018 - Annual Exploration Report ML1437 12 November 2017 – 11 November 2018, dated May 2018 - Email from Integra to DRG submitting the 2017-2018 Exploration Report ML1437, dated 04 May 2018 - Secretary of the Department of Planning, Industry and Environment, Approval to add leases to group report, dated 02 July 2019 - Annual Exploration Report CL382 12 November 2018 – 11 November 2019, dated December 2019. - Annual Exploration Report ML1437 29 April 2018 – 28 April 2019, dated May 2019. Submitted to DRG on 04 May 2019 - Email from Integra to DRG submitting the 2018-2019 Exploration Report CL382, dated 02 December 2019 - Annual Exploration Report ML1437 29 April 2019 – 28 April 2020, dated May 2020 - Email from Integra to DRG submitting the 2019-2020 Exploration Report ML1437 Version 2, dated 05 September 2020		
ML-39	ML1742 ML1740 Note	Exploration Reporting Note: Exploration Reports (Geological and Geophysical) The lease holder must lodge reports to the satisfaction of the Secretary in accordance with section 163C of the Mining Act 1992 and in accordance with clause 59, 60 and 61 of the Mining Regulation 2016.	Integra Underground submits exploration reports to Government via an online portal. No formal response is received from the Secretary or delegate. The system provides automated confirmation that the reports have been submitted and communication from the Government is only expected by exception. The auditor sighted evidence of submission of the annual exploration reports.	Compliant	

Appendix C

Agency Consultation Summary

Appendix C Agency Consultation Summary

Agency Consultation Summary

Topic	Condition	Comments and Evidence
Department of Planning, Industry and Environment		
Noise	Noise management and performance – the Applicant and department receive ongoing complaints from sensitive receiver/s in Camberwell about mine activities in the vicinity of Integra UG operations.	Refer to audit findings against Schedule 3, Condition 2 - 8
Community	Operation of the Community Consultation Committee in accordance with the current CCC Guidelines (2019 version).	Refer to audit findings against Schedule 5, Condition 8
Incident Notification	Notification and reporting of any incidents as per the requirements of Schedule 5 Condition 9 of the approval.	Refer to audit findings against Schedule 5, Condition 9
Rehabilitation	Rehabilitation management, as the 2019 Annual Review indicates that performance targets for rehabilitation areas and gas wells were not met.	Refer to audit findings against Schedule 3, Condition 40
Air Quality	Air quality management and performance against criteria and previous years'.	Refer to audit findings against Schedule 3, Condition 15
Biodiversity	Biodiversity management as the monitoring program measured a decline in biodiversity values at all sites in 2019.	Refer to Biodiversity Specialist Report (Appendix D of Main IEA Report)
Creek Diversions	Maintenance and rehabilitation of creek diversions, as per the project approval, approved management plan/s and statement of commitments. This request comes about from the poor to very poor health of the Bettys Creek diversion, and significant erosion in some sections, as reported in the 2019 Annual Review.	Refer to Surface Water Specialist Report (Appendix D of Main IEA Report)
Groundwater	Groundwater management and performance, noting that the trigger levels for investigation were reached for pH, electrical conductivity and level throughout the 2019 reporting year.	Refer to Groundwater Specialist Report (Appendix D of Main IEA Report)
Singleton Council		
Community – Amenity	The extent to which the applicant has consulted with affected landholders on amenity impacts, the nature of these consultations and the outcomes, including mitigation or other measures taken to address impacts;	Integra UG conduct consultation with landowners primarily through the CCC meetings. No additional consultation was required during the audit period in relation to amenity impacts.

Topic	Condition	Comments and Evidence
Consultation	The extent to which the applicant has consulted with the council on the abovementioned management plans, and what, if any, comments were incorporated into these plans, including whether feedback was provided to the council;	Evidence of consultation with regards to management plan development and update is detailed in the PA 08_0101 audit checklist provided in Appendix D of the main 2020 IEA report.
Mine Closure	Mine closure planning for the Integra UG, given development consent for the current operation will expire in 2022;	The Project Approval has been granted to 2035. The current MOP term is 01 November 2018 to 31 December 2023.
Rehabilitation	The extent to which the applicant has complied with the requirements of Table 12, notably how the applicant intends to minimise adverse socio-economic impacts associated with mine closure;	Refer to findings against Schedule 3, Condition 38
Sewage	Compliance with requirements of any OSSM approval; and	The OSSM was reviewed in conjunction with the relevant conditions in EPL 3390. Specific evidence is provided in the EPL 3390 audit checklist (Appendix B of the main IEA report)
Rehabilitation	Whether the rehabilitation management plan required under the consent aligns to local, regional and State strategic land use planning documents, including whether these documents incorporate final land use outcomes consistent with these strategic land use planning documents.	The rehabilitation management plan has been incorporated into the Mining Operations Plan (MOP) for Integra UG. The MOP does not reference local, regional and State strategic land use planning documents. Final land use outcomes under the current MOP (01 November 2018 - 31 December 2023) are confined to decommissioned gas wells.
Resource Regulator		
Licences	Review relevant mining leases and exploration licences as agreed with Resources Regulator.	Refer to Audit Checklists provided in Appendix B of the main IEA report
General	Undertake an assessment of compliance against the conditions of title related to environmental management.	An assessment of compliance was conducted against the mine's mining leases. The results from this assessment are documented in Appendix D of the main 2020 IEA report.
Rehabilitation	Verify that there is a current Mining Operations Plan (MOP) in place and it has been approved by the Regulator – review compliance against any conditions of approval of the MOP.	Following approval for recommencement of operations in 2017, Integra UG prepared and submitted to the Resource Regulator (RR) a MOP which covered the period of 01 January 2017 to 31 December 2018. RR approved this MOP on 30 November 2016. A new MOP was prepared in 2018 which covered the period 01 November 2018 to 31 December 2023. The MOP was submitted to the RR in November 2018

Topic	Condition	Comments and Evidence
		following the approval of modification 8 to PA 08_0101 and approved on 19 November 2018.
Rehabilitation	Undertake a critical review of the MOP, including an assessment of its compatibility with the description of operations contained in the planning approval. In particular: - Review the rehabilitation strategy as outlined in the MOP to determine if it is consistent with the Project Approval in terms of progressive rehabilitation schedule; and proposed final land use(s). - Review the rehabilitation objectives and completion criteria as outlined in the MOP to determine if they have been developed in accordance with the proposed final land use(s) as outlined in the Project Approval.	This has been specifically addressed in section 6.1.10 of the IEA Report. A critical review of the MOP was conducted as part of the IEA. Audit findings are presented in this report and in the Mining Lease and Project Approval checklists provided in Appendix B of the main IEA report.
Rehabilitation	Review the development and implementation of any rehabilitation monitoring programs to assess performance against the nominated objectives and completion criteria – verified by reviewing monitoring reports and rehabilitation inspection records.	This has been conducted as part of the implementation review of the rehabilitation management plan (MOP). Refer to the PA 08_0101 audit checklist provided in Appendix B of the main IEA report
Rehabilitation	Determine if a rehabilitation care and maintenance program has been developed and implemented based on the outcomes of monitoring program – verified by reviewing Annual Rehabilitation Programs or similar documentation.	A rehabilitation care and maintenance program was not required to be developed at the time of the audit. Rehabilitation during the audit period was conducted in accordance with the approved MOP.
Rehabilitation	Confirm that mining operations are being conducted in accordance with the approved MOP (production, mining sequence etc.), including within the designated MOP approval boundary – to be verified by site plans and site inspection.	This has been conducted as part of the implementation review of the rehabilitation management plan (MOP). Refer to the PA 08_0101 audit checklist provided in Appendix B of the main IEA report
Rehabilitation	Confirm that rehabilitation progress is consistent with the approved MOP as verified by site plans and a site inspection. This should include an evaluation against rehabilitation targets and whether the final landform is being developed in accordance with conceptual final landform in the Project Approval.	Refer to findings against Schedule 3, Condition 40
Rehabilitation	Based on a visual inspection, determine if there are any rehabilitation areas that appear to have failed or that have incurred an issue that may result in a delay in achieving the successful rehabilitation outcomes.	In accordance with schedule 3 condition 32A of PA 08_0101, ten (10) like-for-like trees must be planted and maintained for every established tree removed during construction of the water pipeline infrastructure. Integra UG engaged Enright

Topic	Condition	Comments and Evidence
		Land Management to obtain and plant 100 <i>Casuarina glauca</i> seedlings in January 2018, more than the number of trees required to allow for potential failure of planted trees. However, inspections of the plantings conducted, by the Integra UG E&C department and by Enright Land Management during annual rehabilitation monitoring, identified that of the originally planted 100 trees, approx. 75% had failed and, as a result, planting of an additional of 100 trees was conducted by Enright in October 2020. Planting failure has been attributed to the dry climatic conditions experienced following the initial planting. Tube stock planted in 2020 as well as the surviving approx. 25 originally planted trees were sighted during the site inspection. No other areas of rehabilitation were sighted during the site inspection which appeared to be failing.
Rehabilitation	The audit should also note observations where rehabilitation procedures, practices and outcomes represent best industry practice.	This has been conducted as part of the implementation review of the rehabilitation management plan (MOP). Refer to the PA 08_0101 audit checklist provided in Appendix B of the main IEA report.

Walton, Shani

From: Jennifer Sage <jennifer.sage@dpie.nsw.gov.au>
Sent: Friday, 23 October 2020 5:07 PM
To: Walton, Shani
Cc: Heidi Watters
Subject: [EXTERNAL] FW: Integra UG Mine Independent Environmental Audit Consultation - DPIE

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Blue Category, Red Category

Hello Shani

Thanks for your email on 16 October 2020 requesting input from the Department on key issues for the IEA for Integra Underground Mine.

The Department requests that the Independent Environmental Audit include an assessment of the following aspects of the development –

- Noise management and performance – the Applicant and department receive ongoing complaints from sensitive receiver/s in Camberwell about mine activities in the vicinity of Integra operations.
- Operation of the Community Consultation Committee in accordance with the current CCC Guidelines (2019 version).
- Notification and reporting of any incidents as per the requirements of Schedule 5 Condition 9 of the approval.
- Rehabilitation management, as the 2019 Annual Review indicates that performance targets for rehabilitation areas and gas wells were not met.
- Air quality management and performance against criteria and previous years'.
- Biodiversity management as the monitoring program measured a decline in biodiversity values at all sites in 2019.
- Maintenance and rehabilitation of creek diversions, as per the project approval, approved management plan/s and statement of commitments. This request comes about from the poor to very poor health of the Bettys Creek diversion, and significant erosion in some sections, as reported in the 2019 Annual Review.
- Groundwater management and performance, noting that the trigger levels for investigation were reached for pH, electrical conductivity and level throughout the 2019 reporting year.

The Project Approval doesn't require Integra to follow the 2020 Independent Audit Post Approval Requirements (IA PAR). For existing mining projects, the Integrated Mining Policy documents (including the [Independent Audit Guideline \(2015\)](#)) are still applicable. You may elect to voluntarily follow the IA PAR (2020) however you must still comply with the consent condition relating to the IEA. The transitional arrangements for the IA PAR (2020) are briefly mentioned in this [IA PAR fact sheet](#). From a compliance perspective, we do prefer the compliance status descriptors in the IA PAR, which I'm sure you'd appreciate.

Don't hesitate to contact me on the details below if you want to discuss this or have any queries.

Regards
Jen

Jennifer Sage
Compliance Officer

Planning and Assessment | Department of Planning, Industry and Environment
T 02 6575 3420 **M** 0400 245 170 | **E** jennifer.sage@dpie.nsw.gov.au
PO Box 3145, Singleton NSW 2330
www.dpie.nsw.gov.au



Our Vision: Together, we create thriving environments, communities and economies.

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

From: Walton, Shani <shani.walton@aecom.com>

Sent: Friday, 16 October 2020 3:57 PM

To: DPE PSVC Compliance Mailbox <compliance@planning.nsw.gov.au>

Subject: Integra UG Mine Independent Environmental Audit Consultation - DPIE

FAO: Jennifer Sage

File Referencing	
Project	Integra UG Mine Independent Environmental Audit
Site	Integra Underground Mine
Topic	Consultation with Relevant Agencies – NSW Department of Planning, Industry and Environment

AECOM was approved by the DPIE on 06 October 2020 to conduct the 2020 Independent Environmental Audit (IEA) of the Integra Underground Mine. The IEA is a requirement of the mines Project Approval 08_0101 (as modified), Schedule 5 Condition 12.

The requirement of this condition is outlined below.

INDEPENDENT ENVIRONMENTAL AUDIT

12. By the end of December 2011, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission, commence and pay the full cost of an Independent Environmental Audit of the project. This audit must:

- (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;*
- (b) include consultation with the relevant agencies;***
- (c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);*
- (d) review the adequacy of any approved strategies, plans or programs required under these approvals, with particular reference to management practices to ensure that they align with contemporary best practice industry standards;*
- (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and*
- (f) be conducted and reported to the satisfaction of the Secretary.*

As per DPIE's request the audit team will include technical specialists in the following areas:

- Groundwater
- Surface Water
- Biodiversity
- Geotechnical and Subsidence

AECOM is required to consult with key agencies with a role in regulating the development to obtain their feedback and draw the auditor's attention to any key issues, within the agreed scope of the audit.

Could you please provide comment on the Integra Underground Coal Mine that is relevant to the audit. This could include any compliance issues; environmental performance issues, complaints received or any matter considered appropriate.

In addition, could you please confirm **which post approval audit guideline** (the 2015 or 2020 audit guideline) **you require the audit to be conducted in accordance with.**

We would appreciate comment by the **6 November 2020** if possible to enable us to consider this as part of the audit site inspection.

Thank you for your time and attention to this.

Please contact me on the number below if you would like to discuss any aspect of this request.

Regards,

Shani Walton

Principal Environmental Consultant - Impact Assessment and Permitting

M +61 438 275 138

Shani.Walton@aecom.com

AECOM

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Please consider the environment before printing this email.

MAAG0009154

Ms Shani Walton
AECOM
Level 21
420 George Street
Sydney NSW 2000
By email: shani.walton@aecom.com

Dear Ms Walton

Subject: Integra Underground Mine – Independent Environmental Audit

Thank you for your email dated 17 November 2020 requesting consultation on the independent audit to be undertaken of the Integra Underground Mine which is covered by the following mining leases:

CL382 (1973)	ML1551 (1992)
ML1437 (1992)	ML1630 (1992)
ML1518 (1992)	ML1676 (1992)
ML1525 (1992)	

The Resources Regulator requires that the following issues be addressed in independent environmental audits undertaken in accordance with a planning consent condition.

- Review relevant mining leases and exploration licences as agreed with Resources Regulator.
- Undertake an assessment of compliance against the conditions of title related to environmental management.
- Verify that there is a current Mining Operations Plan (MOP) in place and it has been approved by the Regulator – review compliance against any conditions of approval of the MOP.
- Undertake a critical review of the MOP, including an assessment of its compatibility with the description of operations contained in the planning approval. In particular:
 - Review the rehabilitation strategy as outlined in the MOP to determine if it is consistent with the Project Approval in terms of progressive rehabilitation schedule; and proposed final land use(s).

- Review the rehabilitation objectives and completion criteria as outlined in the MOP to determine if they have been developed in accordance with the proposed final land use(s) as outlined in the Project Approval.
- Review the development and implementation of any rehabilitation monitoring programs to assess performance against the nominated objectives and completion criteria – verified by reviewing monitoring reports and rehabilitation inspection records.
- Determine if a rehabilitation care and maintenance program has been developed and implemented based on the outcomes of monitoring program – verified by reviewing Annual Rehabilitation Programs or similar documentation.
- Confirm that mining operations are being conducted in accordance with the approved MOP (production, mining sequence etc.), including within the designated MOP approval boundary – to be verified by site plans and site inspection.
- Confirm that rehabilitation progress is consistent with the approved MOP as verified by site plans and a site inspection. This should include an evaluation against rehabilitation targets and whether the final landform is being developed in accordance with conceptual final landform in the Project Approval.
- Based on a visual inspection, determine if there are any rehabilitation areas that appear to have failed or that have incurred an issue that may result in a delay in achieving the successful rehabilitation outcomes.

In addition to the above, the audit should note observations where rehabilitation procedures, practices and outcomes represent best industry practice.

It would be appreciated if a copy of the final audit report could be sent to the Regulator at nswresourcesregulator@service-now.com upon completion of the audit.

Yours sincerely

Jenny Ehmsen
Principal Compliance Auditor

24 November 2020

23 October 2020

Our Ref: M20-3

Shani Walton

Principal Environmental Consultant - Impact Assessment and Permitting
AECOM
PO Box Q410
QVB PO
Sydney NSW 1230

Dear Sharni

RE: Integra Underground Mine (Project Approval 08_0101) – Independent Environmental Audit 2020

I refer to your email request dated 16 October 2020 requesting comment from Council on the Integra Underground Mine Independent Environmental Audit. This letter forms Council's feedback in relation to that request.

The conditions of approval for Project Approval 08_0101, require consultation with council on a number of matters, including, but not limited to:

- Surrender of previous consents
- Water Management Plan
- Heritage Management Plan
- Onsite Sewerage Management
- Rehabilitation Management Plan
- Construction Traffic Management Plan

The conditions of approval require the Applicant to establish a community consultative committee with representation from Council and provide a copy of the Audit Report to Council.

Additionally, the conditions of consent require the applicant to comply with Previous EAs. The Statement of Commitments also requires compliance with a number of actions related to council, including monthly reporting of longwall face and linemarking of various council roads.

Council would expect that the audit will include evidence to support the compliance status of these conditions of approval, and of interest to council, evidence to support the following:

- The extent of consultation with council on road related impacts associated with underground mining, including the extent to which underground mining activities may have impacted local roads;

- The extent to which the applicant has consulted with affected landholders on amenity impacts, the nature of these consultations and the outcomes, including mitigation or other measures taken to address impacts;
- The extent to which the applicant has consulted with the council on the abovementioned management plans, and what, if any, comments were incorporated into these plans, including whether feedback was provided to the council;
- Mine closure planning for the Integra Mine, given development consent for the current operation will expire in 2022;
- The extent to which the applicant has complied with the requirements of Table 12, notably how the applicant intends to *minimise adverse socio-economic impacts associated with mine closure*;
- Compliance with requirements of any OSSM approval; and
- Whether the rehabilitation management plan required under the consent aligns to local, regional and State strategic land use planning documents, including whether these documents incorporate final land use outcomes consistent with these strategic land use planning documents.

I would like to thank you for the opportunity to provide comment on scope for the Integra Mine Independent Environmental Audit. Should you have any questions or comments, please contact Mary-Anne Crawford, Manager Development and Environmental Services on 02 6578 7290.

Yours faithfully



Mary-Anne Crawford
Manager Development and Environmental Services

Walton, Shani

From: Lisa Andrews <ic.articulatesolutions@gmail.com>
Sent: Friday, 30 October 2020 8:56 AM
To: Walton, Shani
Subject: [EXTERNAL] Re: Integra UG Mine Independent Environmental Audit Consultation - CCC

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Categories: Blue Category, Red Category

Thank you for your email Shani. There was a meeting of the Integra Underground Community Consultative Committee yesterday. I informed all members of the upcoming audit and requested that they advise me of any issues that they wished you to concentrate on, or to provide any comments.

I'll forward these on, if and when received.

Regards
Lisa

Lisa Andrews
Director
Articulate Solutions Pty Ltd
t: 0401 609 693
e: ic.articulatesolutions@gmail.com



Virus-free. www.avast.com

On Fri, Oct 16, 2020 at 3:57 PM Walton, Shani <shani.walton@aecom.com> wrote:

FAO: Lisa Andrews

File Referencing	
Project	Integra UG Mine Independent Environmental Audit
Site	Integra Underground Mine
Topic	Consultation with Relevant Agencies – Community Consultative Committee

AECOM was approved by the DPIE on 06 October 2020 to conduct the 2020 Independent Environmental Audit (IEA) of the Integra Underground Mine. The IEA is a requirement of the mines Project Approval 08_0101 (as modified), Schedule 5 Condition 12.

The requirement of this condition is outlined below.

INDEPENDENT ENVIRONMENTAL AUDIT

12. By the end of December 2011, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission, commence and pay the full cost of an Independent Environmental Audit of the project. This audit must:

(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;

(b) include consultation with the relevant agencies;

(c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);

(d) review the adequacy of any approved strategies, plans or programs required under these approvals, with particular reference to management practices to ensure that they align with contemporary best practice industry standards;

(e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and

(f) be conducted and reported to the satisfaction of the Secretary.

As per DPIE's request the audit team will include technical specialists in the following areas:

- Groundwater
- Surface Water
- Biodiversity
- Geotechnical and Subsidence

AECOM is required to consult with key agencies with a role in regulating the development to obtain their feedback and draw the auditor's attention to any key issues, within the agreed scope of the audit.

Could you please provide comment on the Integra Underground Coal Mine that is relevant to the audit. This could include any compliance issues; environmental performance issues, complaints received or any matter considered appropriate.

We would appreciate comment by the **6 November 2020** if possible to enable us to consider this as part of the audit site inspection.

Thank you for your time and attention to this.

Please contact me on the number below if you would like to discuss any aspect of this request.

Regards,

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Appendix D

Technical Specialists Findings

Appendix D Technical Specialists Findings

Technical Specialist Audit Findings

Independent Environmental Audit Report - Integra Underground

Technical Specialist Audit Findings

Independent Environmental Audit Report - Integra Underground Coal Mine

Client: Glencore Coal Assets Australia

ABN: 48 163 821 298

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Quality Information

Document Technical Specialist Audit Findings

Ref 60644547

Date 15-Sep-2020

Prepared by Amanda Kerr; Henk Buys; Jamie McMahon; Katherine Hutton

Reviewed by Shani Walton

Revision History

Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
0	18-Jan-2020	Draft for client review	Shani Walton 2020 IEA Lead Auditor	
1	04-Jan-2020	Draft report	Shani Walton 2020 IEA Lead Auditor	
2	17-Feb-2020	Final report	Shani Walton 2020 IEA Lead Auditor	
3	15-Sep-2021	Final report with amendments made at DPIE request	Shani Walton 2020 IEA Lead Auditor	

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1.0 Introduction

AECOM Australia Pty Ltd (AECOM) was engaged by Integra Underground Coal Mine (Integra) to conduct an Independent Environmental Audit (IEA) of the Integra Underground Mine (Integra UG).

The IEA is a requirement of the mine's Project Approval 08_0101, specifically Schedule 5, Condition 12 and 13.

The Department of Planning, Industry and Environment (the Department) required the audit team to include technical experts in the following fields:

- groundwater
- surface water
- biodiversity
- geotechnical assessment of subsidence impacts.

This report summarises the technical specialists activities and findings and should be read in conjunction with the Integra Underground Coal Mine 2020 Independent Audit Report (AECOM, 2020), referred to herein as the Integra 2020 IEA report.

1.1 Audit Details

Appointment of the audit team was granted by the Planning Secretary on 06 October 2020, refer Appendix B of the Integra 2020 IEA report. This included endorsement by the Department for the technical specialists outlined in the table below.

Table 1 Audit Team Technical Specialists

Personnel	Audit Team Role
Katherine Hutton	Groundwater Specialist
Amanda Kerr	Surface Water Specialist
Jamie McMahon	Biodiversity Specialist
Henk Buys	Geotechnical Assessment and Subsidence Impacts Specialist

The scope of the IEA is outlined in Section 2.5 of the Integra 2020 IEA report. Compliance was required to be assessed against Project Approval 08_0101 (as modified) and associated management plans, programs and assessments and Environmental Protection Licence 3390 and active Mining/Coal Leases.

Technical input was provided by the specialists which has been captured in the relevant sections of the audit compliance tables located in Appendix A of the Integra 2020 IEA report.

The technical specialists relied on visual observations gathered during the audit site inspection, review of monitoring data recorded during the audit period, external technical reports as well as reporting and records maintained by Integra UG. No on-site monitoring or sampling was conducted by the specialists as part of the IEA.

2.0 Site Context

2.1 Surface Water

Integra UG is situated within the catchment of Glennies and Bettys Creeks. Glennies Creek, including its minor tributary Main Creek, flow to the south where it discharges into the Hunter River, while Bettys Creek flows to Bowman Creek which also flows to the south before discharging into the Hunter River. The dominant land uses within these catchments include coal mining, agriculture and forestry. The local topography in the vicinity of the active mining area is characterised by several narrow valleys that slope steeply from elevated terrain in the north-east to the low-lying Hunter River floodplain in the south-west.

No mining occurred within the catchments of Main Creek and Glennies Creek during the audit period. Mining activities occurred within the catchment boundary of Bettys Creek. The Mount Owen Middle Bettys Creek Diversion traverses LW 13 and 14 for approximately 1.5km and converges with the natural creek channel.

Integra has approval to conduct creek diversion works for Bettys Creek and Main Creek. These diversions are associated with underground mining of the Hebden Seam. It is noted that mining of the Hebden Seam by Integra UG had not been conducted and was not planned to occur at the time of the audit. As such, management measures and Project Approval obligations relating to mining of the Hebden Seam, including the Bettys Creek and Main Creek diversions, were not triggered during the audit period.

2.2 Groundwater

The main watercourses relevant to Integra UG are Glennies, Bettys and Main Creeks with the groundwater regime consisting of:

- Unconsolidated alluvium along the channels of the creeks
- Low-yielding aquifers separated by aquicludes and aquitards.

The Glennies, Main and Bettys Creek alluvial aquifers are defined as shallow up-river aquifers and are characterised by low permeability clay and sandy sediments overlaying basal clayey gravels.

Integra UG generally comprises gentle undulating hills dissected by flood plains along the water courses. Due to historical farming and mining, the majority of the active mining area is cleared of vegetation, except for remnant vegetation occurring in riparian zones along the water courses.

Active mining occurs within the Hunter Valley coalfields, which has a long history of mining the Permian Coal Measures, dating back to the 1950's.

Surrounding the active mining area, land use includes coal mining operations and agriculture. Agricultural and environmental land use includes:

- cattle grazing in open pastures
- improved pasture and cropping along the flood plains
- vegetation, including riverine vegetation along drainage lines.

Potential Groundwater Dependent Ecosystems (GDEs) have been identified primarily in riparian areas along Bettys Creek and Main Creek.

2.3 Biodiversity

The Integra UG project approval area has been highly disturbed by land clearing, grazing and mining operations. The project approval area is primarily comprised of cleared native forest with varying degrees of native plant species diversity.

Previous ecological assessments conducted by Peake, ERM, Umwelt and Hansen Bailey indicate that the vegetation communities within the project area include:

- Central Hunter Ironbark – Spotted Gum – Grey Box Forest
- Central Hunter Bulloak Forest
- Central Hunter Swamp Oak Forest
- Hunter Valley River Oak Forest
- Hunter Lowland Red Gum Forest
- Cleared and revegetated areas associated with historical clearing and grazing by stock.

Critical areas of concern with regards to biodiversity management in relation to ongoing mining operations include the following:

- **Threatened species** - No threatened flora species have been identified within the Integra UG project approval area however a number of threatened fauna species have been identified within the vicinity of the mining area. These include Green and Golden Bell Frog (*Litoria aurea*), Grey-crowned Babbler (*Pomatostomus temporalis*) Speckled Warbler (*Pyrrholaemus sagittatus*), Diamond Firetail (*Stagonopleura guttata*), Black-chinned Honeyeater (*Melithreptus gularis gularis*), Brown Treecreeper (*Climacteris picumnus*), Southern Myotis (*Myotis macropus*) and Brush-tailed Phascogale (*Phascogale tapoatafa*).
- **Bettys Creek** - Bettys Creek is an ephemeral, fourth order, Schedule 2 stream whose riparian vegetation is dominated by *Casuarina* along with sedges, rushes and grasses in the channel and more cleared areas. Stream flow in Bettys Creek and its tributaries is essentially absent during extended drought periods, with isolated storm events generating short term flow with subsequent disconnected ponding.
- **Mount Owen Bettys Creek Diversion** - The Bettys Creek diversion around the Eastern Rail Pit and the associated West Dump was constructed in 2006 and 2007 by Mount Owen Complex's (MOC's) open cut operations. The diversion has been undermined by mining of Integra UG's Longwalls 13 and 14 between 2017 and 2019.
- **Groundwater Dependent Ecosystems (GDEs)** - GDEs have been identified as being associated with Bettys Creek and Bettys Creek Diversion and terrestrial vegetation GDEs associated with the Central Hunter Swamp Oak Forest and Hunter Valley River Oak Forest.
- **Bettys Creek Habitat Management Area (HMA)** - The Bettys Creek HMA occupies an area of approximately 174 ha. The Bettys Creek HMA is monitored and managed by MOC.

2.4 Subsidence

Access to Integra UG mine entries and primary surface facilities is located approximately 12 km northwest of Singleton, NSW. Integra UG's mining operations include coal extraction from the Middle Liddell seam which involve first workings utilising continuous miners followed by second workings employing retreating longwall methods. Longwall mining is the only form of secondary extraction utilised by Integra UG.

To date, coal has been mined from the Middle Liddell Seam only, despite the mine having approval also to mine the Hebden and Barrett seams. This includes a drift to the Hebden Seam that has not progressed to development.

The coal seams of economic interest are in the Foybrook Formation of the Wittingham Coal Measures comprising a sequence of coal seams, mudstone, siltstone, sandstone and conglomerate which formed as a river dominated delta system, prograded from the New England Fold Belt. The Foybrook Formation is 300 -350m thick at the Integra UG mine.

During the audit period the following mining activities occurred in the Middle Liddell Seam:

- Longwall 13: Secondary extraction of Longwall 13 commenced on 23 May 2017, prior to the commencement of the audit period. Longwall 13 completed mining on 10 August 2018
- Longwall 14: Secondary extraction of Longwall 14 commenced mining on 07 September 2018 and finished production on 17 August 2019

- Longwall 15: Secondary extraction of Longwall 15 commenced production on 19 September 2019. Mining of Longwall 15 was completed on 05 May 2020. At completion of mining the total void length for Longwall 15 was 1834m, with a void width of 257m
- Longwall 16: Secondary extraction of Longwall 16 commenced on 09 June 2020. The auditors were informed that the Longwall 16 extraction face was at chainage 725m on 30 November 2020.

Mining activities conducted during the audit period were conducted below a variety of key surface features as outlined in Figure 1 and Figure 2 and comprised the following:

- Agricultural Land
- Areas modified by surface mining
- Items of mining-related infrastructure including gas drainage installations and equipment
- Bettys Creek middle diversion channel and Bettys Creek natural section and adjacent floodplain
- Bettys Creek Habitat Management Area
- Aboriginal and historical heritage sites
- Farm dams, natural dams and minor drainage lines
- Mount Owen Railway line and infrastructure
- Eastern Rail Pit (ERP)
- Mount Owen Stage 5 Tailings Dam (TP2)
- Rehabilitated Mount Owen West Dump
- Ravensworth East/Glendell emplacement areas
- Eastern storm water dam for the West Dump and ERP Sediment dam with associated pumping and power supply equipment
- Water supply and transfer pipeline
- Overhead powerline and communications cables
- Rail and road bridges.

Figure 1 Surface features for Longwalls 15-16 (Source: Extraction Plan LW15-16)

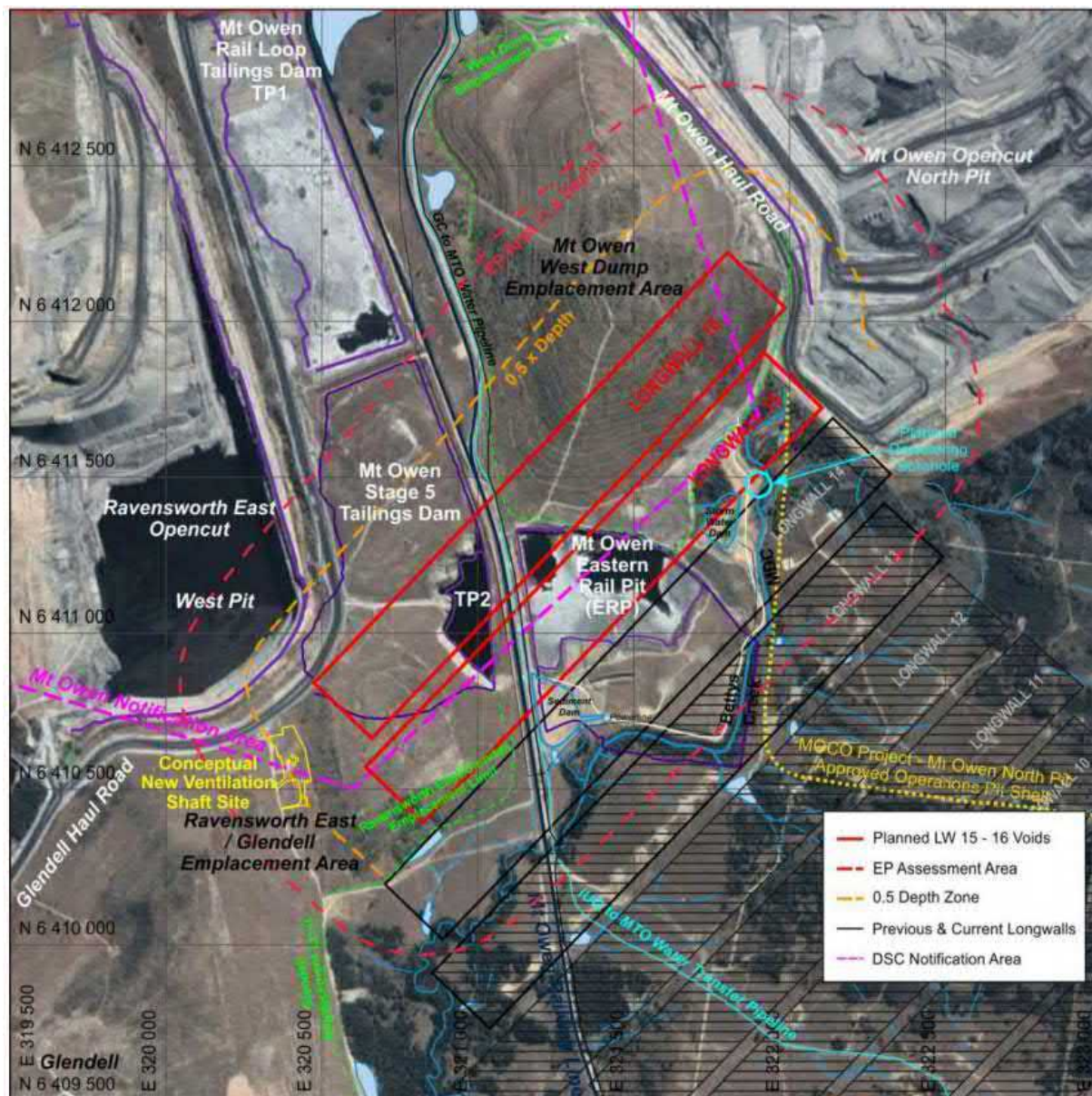
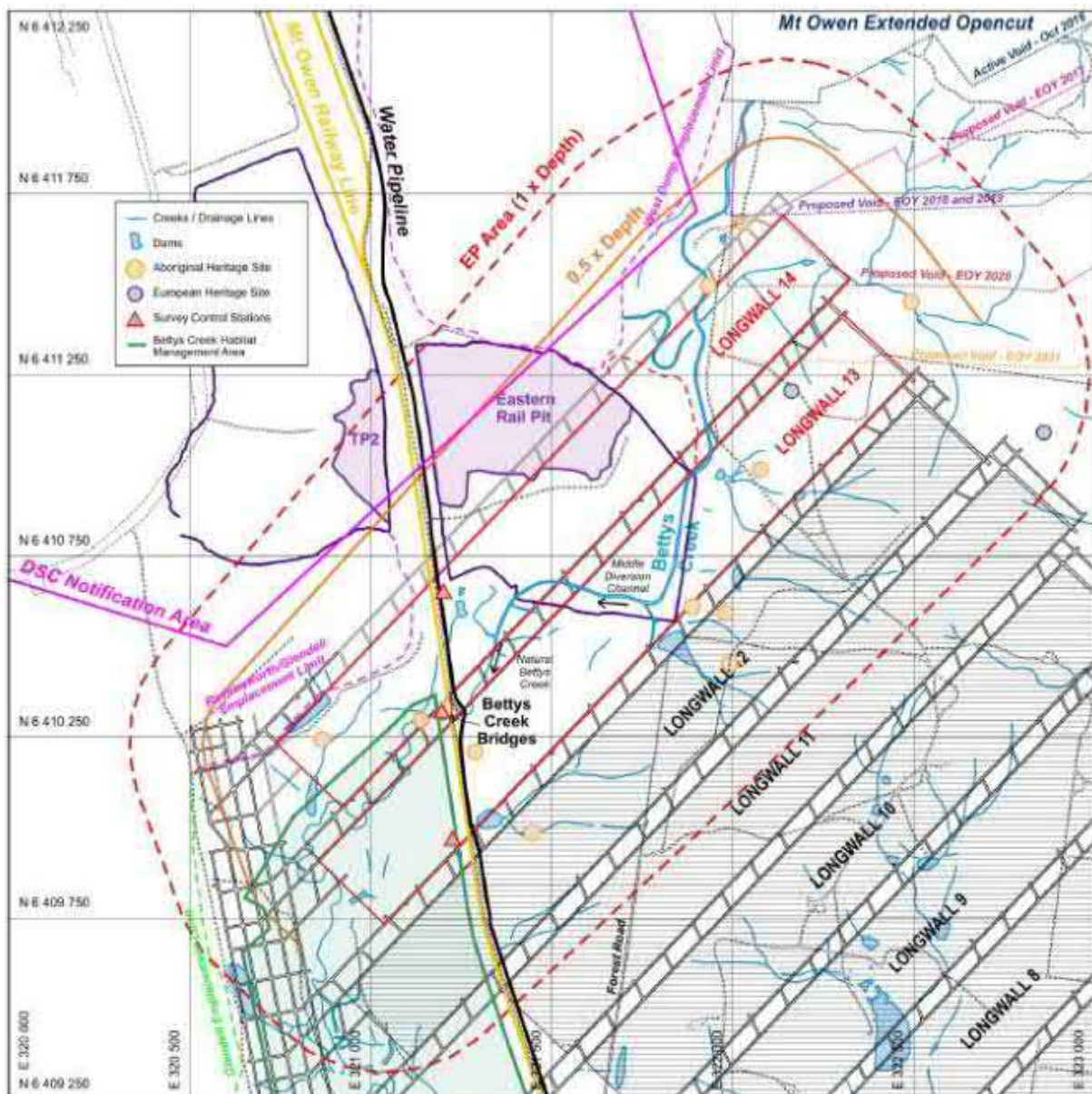


Figure 2 Surface features for Longwalls 13-14 (Source: Extraction Plan LW13-14)

3.0 Environmental Management Overview – Specialist Areas

3.1 Management of Surface Water On-site

Integra UG is not permitted under Project Approval 08_0101 or EPL 3390 to discharge water offsite and is not licenced to dispose of mine water through the provisions of the Hunter River Salinity Trading Scheme. Integra UG utilises a combination of mine water dams, mine water pumping, pipeline systems, sediment dams and clean water diversions to prevent water from being discharged offsite.

Integra UG operates a water management system which categorises water as either clean water (i.e. water from rehabilitated areas, local water sources or undisturbed mining activities), dirty water (i.e. water from clearing, hardstands, laydown areas, unsealed roads or unestablished rehabilitation) or mine water (i.e. water from haul roads, workshop areas, the vehicle wash down bay and storage yards, as well as rehabilitated overburden dumps). Integra UG also treat and irrigate sewage effluent generated from the mine site.

Integra UG's mine water management system is integrated with the mine water management system at Rix's Creek Mine and the Mount Owen Mine Complex (MOC) via a pipeline which enables the transfer of mine water from the Portal Sump to MOC as part of the Greater Ravensworth Area Water Sharing Scheme.

The *Integra UG Water Management Plan* (WMP) (September 2019) outlines how Integra UG manages the environmental and community aspects, impacts and performance relevant to the site water management system. The WMP provides a framework for the management measures implemented to manage the surface water impacts of mine operations in accordance with Glencore Coal Assets Australia's (Glencore's) policies and standards, and all relevant licences and environmental approvals held by the mine. The surface water specialist conducted a review against the WMP to determine the adequacy of the management measures outlined in the plan and their alignment with contemporary best practice industry standards, refer to section 0.

3.2 Management of Groundwater On-site

Integra UG currently holds a number of water licences relevant to underground dewatering and groundwater monitoring. These licences are summarised in Section 2.2 of the 2020 IEA Report.

Integra UG implements a groundwater monitoring program as the primary means of collecting information relating to groundwater levels and groundwater quality. The groundwater monitoring program focuses on collecting information on potential impacts to:

- Groundwater levels on neighbouring properties and any beneficial groundwater users
- Groundwater dependant ecosystems associated with alluvial aquifers of Glennies Creek, Bettys Creek and Main Creek
- Groundwater quality
- Water licence compliance.

The groundwater monitoring program includes a representative number of monitoring locations within Bettys Creek and Main Creek alluvials and coal measures outlined in Table 8-1 of the WMP. There are also an additional three bores (DH313, DH323A and DH324) that can be utilised as monitoring locations in groundwater model calibration activities.

Groundwater monitoring points have been summarised below:

- GCP3S – Bettys and Main Creek Alluvium
- GCP4S – Bettys and Main Creek Alluvium
- GCP11 – Bettys and Main Creek Alluvium
- GCP17 – Bettys and Main Creek Alluvium
- GCP39 – Bettys and Main Creek Alluvium

- GCP40 – Bettys and Main Creek Alluvium
- GCP9 – Glennies and Station Creek Alluvium
- GCP3D – Coal Measures
- GCP4D – Coal Measures
- GCP 18 – Coal Measures
- DDH 224 – Coal Measures
- DDH316 – Coal Measures installed before commencement of secondary extraction of LW 15.

Key groundwater management controls required to be implemented during the audit period include the following:

- Bimonthly groundwater water level monitoring at monitoring sites outlined in the WMP
- Bimonthly electrical conductivity and pH monitoring at monitoring sites outlined in the WMP
- Annual groundwater quality sampling at open standpipe piezometers at monitoring sites outlined in the WMP
- Groundwater monitoring data will be summarised in end of panel reports following completion of extraction of each longwall panel
- An annual groundwater management report will be prepared which will include a summary of:
 - All raw water monitoring data, an interpretation of that data and a discussion of trends identified in the data and their implications
 - All groundwater extraction data (volumes and rates) taken by the works, the extent of aquifer depressurisation and the salinity impacts, compared with predictions of aquifer performance made in the environmental impact statement or similar project documents
 - An overall comparison of groundwater performance with predictions for the life of the mine provided in the development application and supporting documentation
 - Water related activities performed and the level of compliance with Groundwater Management Plan, and an outline of the proposed adaptive or remediation actions
 - Assessment of extraction or other depressurisation impacts caused by the works to external water sources, water users or groundwater dependant ecosystems.
- Integra UG have an implemented groundwater Trigger Action Response Plan (TARP) which is activated if the groundwater monitoring results are outside the groundwater trigger value range for three consecutive monitoring events. Should this occur, further investigations are required into the trigger exceedances.

3.3 Management of Biodiversity On-site

Integra UG prepared the site-wide Biodiversity Management Plan (BMP) to comply with the requirements of Project Approval 08_0101 Schedule 3, Condition 32. The BMP was developed to address biodiversity management related to Integra UG's extraction of the Middle Liddell seam for Longwalls 13-20 and covers existing and planned surface disturbance associated with the project.

The BMP has been subject to several revisions since preparation of version 1.0 in February 2017, with the current version being 3.1 (August 2019). This was the version subject to audit.

The BMP has been prepared in accordance with Schedule 3, Conditions 20(g) and 32 of the mine's current active development consent (PA 08_0101). The BMP states its objectives as:

- Provide a description of the activities at Integra UG which have the potential to impact on biodiversity in the project area

- Provide a series of mitigation measures to minimise impact to threatened species, including GDEs
- Provide mitigation measures to minimise impacts from identified activities to be undertaken at Integra UG
- Provide a monitoring program for the assessment of potential impact of underground mining on identified threatened species.

The plan sets out all of the mine's requirements relating to biodiversity, including those within the Development Consent and key commitments made within the environmental assessment, which are addressed in subsequent sections of the BMP.

The BMP also outlines vegetation present within the site, including threatened ecological communities (TECs). Threatened species are also discussed and maps included. The plan discusses potential impacts outlined in various assessments and outlines proposed controls and management strategies. These include specific commitments around vegetation, fauna, soils, bushfire, landscaping/revegetation, weeds and waterways.

Key biodiversity management controls required to be implemented during the audit period include the following:

- Ecological monitoring including:
 - Baseline monitoring of exploration areas and then annual monitoring after establishment, and then two yearly monitoring following review of the results from the annual program
 - Annual quadrat monitoring conducted after establishment and then every two years.
 - Annual monitoring of compensatory stock plantings
 - Quarterly weed and pest monitoring during the first two years and then ongoing annual monitoring
 - Betty's Creek aquatic stream and riparian health monitoring conducted pre and post mining Longwalls 13 and 14 and after stream flow events. Post extraction of Longwall 14 on 17 August 2019 the monitoring frequency was reduced to once annually for a period of two years i.e. until August 2021.
- Planting of compensatory like-for-like trees where the removal of established trees is required due to construction associated with Modification 7 and 8 of PA 08_0101.
- Subsidence impacts will be assessed in accordance with the IUG LW 13-14 Extraction Plan and the IUG LW 15-16 Extraction Plan. A subsidence monitoring location within the Ravensworth State Forest and Southern Remnant Area was planned to be established to monitor impacts from subsidence in these areas, however these locations are only required in relation to Longwalls 17-20 (not mined during the audit period), and more specifically Longwalls 19-20. Further, the mine plan has been revised since the Mod 8 approval (PA 08_0101) and the longwalls will be shorter due to geological constraints. That is, the longwalls will be further away from the locations in question. A subsidence assessment has been completed as part of the IUG LW 17-20 Extraction Plan. This subsidence assessment confirmed that these locations/ surface features are located outside of the area where potential subsidence impacts are regarded as significant and any subsidence would be imperceptible for all practical purposes.
- Implementation of the Ground Disturbance Permit (GDP) process including the conduct of pre-clearance surveys.
- Implement weed control works
- Monthly inspections conducted by the Integra UG E&C department.
- Monitoring of rehabilitated areas conducted in accordance with the IUG Mining Operations Plan

An implementation review was conducted against the abovementioned management measures, findings from this review are detailed in Section 8.0.

Commitments are also made in the BMP to monitor the establishment and success of areas rehabilitated post-mining. A TARP is also provided to address specific potential risks relating to biodiversity that may occur. As this TARP was not activated during the audit period, it was not possible to carry out an implementation review of the TARP.

3.4 Management of Subsidence On-site

Extraction during the audit period occurred across Longwalls 13-16, as detailed in Section 2.4. As such, the following extraction plans, developed in accordance with Schedule 3, Condition 20 of Project Approval 08_0101 are applicable during the audit period of assessment:

- Integra Underground Longwalls 15 and 16 Extraction Plan, INTUG-793190785-2055, Version 1.1 dated 08 August 2019 (EP LW 15-16)
- Integra Underground Longwalls 13 and 14 Extraction Plan, INTUG-793190785-151, Version 3.0 dated 11 August 2017 (EP LW 13-14)

Subsidence is managed in accordance with the abovementioned Extraction Plans. In accordance with Schedule 3, Condition 20 updates were made to the following existing site wide documents:

- Water Management Plan
- Biodiversity Management Plan
- Aboriginal Heritage Management Plan
- Mining Operations Plan.

In addition, a series of Sub-Management Plans and Programs have been prepared under each Extraction Plan.

Table 2 Sub Plans under the Integra UG Extraction Plans

Extraction Plan - Longwalls 13-14	Extraction Plan - Longwalls 15-16
Coal Resource Recovery Plan	Coal Resource Recovery Plan
Subsidence Monitoring Program	Subsidence Monitoring Program
Public Safety Management Plan	Public Safety Management Plan
Land Management Plan	Land Management Plan
Built Features Management Plan, inclusive of:	Built Features Management Plan, inclusive of:
• Mount Owen Railway and Bettys Creek Bridges Asset Management Plan	• Mount Owen Railway and Bettys Creek Bridges Asset Management Plan;
• Eastern Rail Pit Asset Management Plan	• Mount Owen Mine Key Features - Asset Management Plan
• Mount Owen TP2 Asset Management Plan	
• Bettys Creek Diversion Asset Management Plan	
Subsidence Management Protocol	Subsidence Management Protocol

4.0 Agency Consultation

Schedule 5, Condition 12(b) of Integra's Project Approval 08_0101 requires the IEA to include consultation with relevant agencies. Any comments received from the consultation process is required to be recorded and reported in the IEA report and any specific issues investigated as part of the audit. This section outlines the technical specialists response to relevant feedback received from regulatory agencies.

4.1 Feedback received – Surface Water

Feedback received from the Department requested that the IEA include an assessment of the maintenance and rehabilitation of creek diversions, as per the project approval, approved management plan/s and statement of commitments. The Department commented that this request comes from the poor to very poor health of the Bettys Creek diversion, and significant erosion in some sections, as reported in the 2019 Annual Review.

Feedback received by Singleton Council requested that compliance with the requirements of the on-site sewage management system (OSMS) was of particular interest to the Council.

The remaining feedback received did not specify any further comments in relation to surface water.

4.2 Response to Feedback – Surface Water

4.2.1 Mount Owen Bettys Creek Diversion

The Bettys Creek and Main Creek diversions referenced in Schedule 3, Condition 27 and 28 had not been triggered at the time of the audit as mining had not occurred in the Hebden Seam. Mining was only conducted under the Mount Owen Middle Bettys Creek Diversion which traverses LW 13 and 14 for approximately 1.5 km.

Integra engaged SLR Consulting to conduct stream health assessments of Bettys Creek in accordance with Schedule 3, Condition 29 of Project Approval 08_0101. Results from these technical reports along with the findings from inspections conducted by the Integra Environment and Community (E&C) department are reported in the Annual Reviews each year. A review of the Annual Reviews, monitoring reports prepared in accordance with the WMP and the Bettys Creek Diversion Asset Management Plan, technical reports prepared by external consultants and internal E&C department inspection forms was conducted along with a visual assessment of Bettys Creek conducted on 03 December 2020. The following was identified:

- The catchment area for Bettys Creek has been extensively modified through clearing for mining, logging and grazing activities with additional changes as a result of surrounding mining activities, including the diversion and re-alignment of Bettys Creek by MOC.
- Stream health and stability assessments conducted between May 2017 – May 2020 show that stream health ranged from Poor to Very Poor across all monitoring locations when Glencore commenced baseline monitoring in May 2017. Prior to this the Integra UG mine was in Care and Maintenance and no underground mine activity was occurring below the Mount Owen Middle Bettys Creek Diversion. Stream Health since recommencement of mining in 2017 was sustained as Poor to Very Poor with classifications of Average and Good recorded in 2019 and 2020.
- Monitoring results indicate that no significant changes have been recorded in relation to the condition of the Mount Owen Middle Bettys Creek Diversion. Various degrees of erosion have been identified throughout the diversion however the technical reports conclude that there is no evidence to indicate that the poor condition or impacts observed at the diversion are a result of Integra UG's operations.
- The cause of cracks running parallel to the diversion has not been identified however it has been suggested by SLR and reported by Integra that the cause of these cracks is potentially due to storm events, slumping following construction by MOC or historical mining activity. Integra UG monitor this cracking by way of visual inspections and inform MOC of any changes observed.

- Site inspection including accessing 2 – 3 locations along the diversion. It was observed that, in parts, banks of the diversion were lacking in groundcover vegetation and evidence of rill erosion of the banks was observed. However, it is unlikely the rill erosion of the banks is a result of underground mining and considered more likely a function of recent climatic conditions (prolonged drought), soil types and bank slope.

A review of Mount Owen Middle Bettys Creek Diversion was also conducted by the audit biodiversity specialist. Findings from this review are referenced in the IEA report and in Section 8 of this report.

4.2.2 Effluent Treatment

A sewage treatment system maintenance program was developed to comply with Singleton Council's Sewage Treatment Plant approval (OSMS Approval No. 3969/2008) and conditions of the mines Environmental Protection Licence (EPL) 3390. The on-site sewage treatment system includes a primary aeration tank with a secondary maturation pond and a package sewage treatment plant.

The OSMS was reviewed in conjunction with the relevant conditions in EPL 3390. Specific evidence is provided in the EPL 3390 audit checklist.

4.3 Feedback received – Groundwater

Feedback received from the Department requested that the IEA include an assessment of groundwater management and performance, noting that the trigger levels for investigation were reached for pH, electrical conductivity and level throughout the 2019 reporting year.

4.4 Response to Feedback – Groundwater

Trigger limits were reached on the following occurrences during the audit period:

- 2018: Six occasions including 01 February, 09 April, 01 June, 01 August, 02 October and 30 November 2018
- 2019: Six occasions including 31 January, 29 March, 21 May, 30 July, 25 September and 15 November 2019
- 2020: Three occasions including 15 January, 27 March and 20 May 2020.

Integra UG engage GeoTerra Pty Ltd (GeoTerra) to conduct investigation into any groundwater TARP trigger exceedances recorded during the audit period. The following conclusions have been drawn from trigger level exceedance investigations:

- pH: the levels recorded are within the historic pH range that has been observed since April 2005 for GCP3S, and is within a gradual acidification trend observed in GCP3D and GCP4D that has been observed since late 2015. pH exceedances are concluded to be oxidation of primary sulphide species, such as pyrite, and the introduction of buffering species such as bicarbonate.
- Salinity: the electrical conductivity (EC) trigger exceedances are not considered to be statistically significant and are within ranged observed historically. GeoTerra concluded in July 2020 that the results are not directly due to influences from activities or operations conducted by Integra UG. Factors influencing EC exceedances are primarily the amount of groundwater recharge from rainfall events, reduced rainfall resulting in higher EC. A recommendation has been made for ongoing monitoring at three locations (GCP4D, GCP18 and GCP40). Ongoing monitoring and assessment are recommended to assess the occurrence or continuation of salinity trends.
- Groundwater Levels: Groundwater elevations at four locations (GCP3D, GCP4S, GCP4D and GCP9) have been outside TARP criteria since the introduction of the WMP in 2017, and at one location (GCP3S) since 2018. This is concluded as primarily being due to groundwater recharge from rainfall events, reduced rainfall resulting in elevations below the TARP criteria. Ongoing monitoring is recommended to assess long term water level trends in association with rainfall.

The audit evidence reviewed satisfied that Integra UG is effectively following the TARP procedure with regards to groundwater trigger level exceedances. Investigations conducted by external groundwater consultants do not attribute groundwater trigger level exceedances to Integra UG's operations.

4.5 Feedback received – Biodiversity

Feedback received from the Department requested that the IEA include an assessment of biodiversity management by Integra UG, as the monitoring program measured a decline in biodiversity values at all sites in 2019.

4.6 Response to Feedback – Biodiversity

The IEA satisfies the Department's request for an assessment of biodiversity management by Integra UG to be conducted as part of the 2020 IEA.

4.7 Feedback received – Subsidence

No agency feedback was provided in response to the requests made by the AECOM lead auditor (refer 2020 IEA report) which related specifically to subsidence and required addressing by the Subsidence specialist in the 2020 IEA. A summary of agency consultation conducted, and feedback responses is provided in Section 3.3 and Appendix C of the main 2020 IEA report.

5.0 Environmental Performance – Specialist Areas

5.1 Review of surface water performance

5.1.1 Trigger exceedances

Surface water monitoring results, as noted in both the 2018 and 2019 Annual Reviews, and 2020 Monthly Monitoring Reports:

- pH: maximum pH of 8.2 – 8.3 recorded at the Glennies Creek monitoring sites, across both reporting years compared to an upper criterion of 7.9. Annual Review notes that investigations carried out indicated that these monitoring results:
 - were within historic ranges which have been observed since February 2009.
 - are outside the subsidence impact zone and are not attributable to Integra Underground.
- EC: elevated EC levels (<690 µS/cm) have been recorded during 2020:
 - February 2020 at GC2/W4 Nobles Crossing and GC3 Glennies Creek
 - April 2020 at GC2/W4 Nobles Crossing
 - August 2020 at GC1 Glennies Creek, GC2/W4 Nobles Crossing, and GC3 Glennies Creek
 - September 2020 at GC2/W4 Nobles Crossing.
- TSS:
 - Exceedances of Total Suspended Solids (TSS) criteria were recorded in February 2018 at GC1 Glennies Creek and MC3 Main Creek. Elevated TSS levels appear to be due to low flow, and higher than average temperatures. Integra Underground will continue to monitor in 2019.
 - Exceedances of TSS criteria were recorded in September, October and December 2019 at GCSW06 Sewerage Pond.

5.1.2 Incidents

No reportable incidents were recorded in relation to surface water.

5.1.3 Complaints

No complaints were received in relation to surface water at Integra during the audit period.

5.2 Review of groundwater performance

5.2.1 Trigger exceedances

A summary of trigger exceedances and Integra UG's management of these exceedances is provided in [Section 4.4](#).

5.2.2 Incidents

A review of incidents logged in CMO during the audit period was conducted. No reportable incidents were recorded during the audit period. No evidence of a reportable incident occurring was observed by the auditors.

5.2.3 Complaints

No complaints were received in relation to groundwater at Integra during the audit period.

5.2.4 Reporting

A summary of groundwater monitoring is provided in Section 7.6 of the Annual Review.

5.3 Review of biodiversity performance

5.3.1 Trigger exceedances

The TARP detailed in the Biodiversity Management Plan was not activated during the audit period.

5.3.2 Incidents

A review of incidents logged in CMO during the audit period was conducted. No reportable incidents were recorded during the audit period. No evidence of a reportable incident occurring was observed by the auditors.

5.3.3 Complaints

No complaints were received in relation to Biodiversity at Integra UG during the audit period.

5.3.4 Reporting

A summary of biodiversity monitoring and mining impacts is provided in Section 6.4 of the Annual Review. Section 6.8 of the Annual Review provides a summary of the status of weed and pest management.

5.4 Review of subsidence performance

5.4.1 Trigger exceedances

The TARP detailed in the Integra UG Extraction Plans was not activated during the audit period.

Table 3 provides a comparison of the measured subsidence impacts compared to those predicted in the Subsidence Assessments conducted by external consultant SCT. The measured impacts reported in the table below were recorded in the end of panel subsidence reports prepared at the completion of each longwall. It is noted that the subsidence impacts measured at the completion of each longwall were expected to increase as mining progressed into the next longwall. The incremental subsidence impacts for each longwall continue to be assessed and reported in the subsidence monitoring reports and end of panel reports. Maximum incremental subsidence impacts reported for Longwalls 13 and 14 increased due to mining of Longwalls 15 and 16.

Table 3 Comparison of Predicted and Actual Subsidence Impacts

Longwall		Subsidence (m)	Tilt (mm/m)	Tensile Strain (mm/m)	Compressive Strain (mm/m)
LW 13	Predicted	1.4	14	7	10
	Actual: End of Panel	<0.7	<5	<4	<4
LW 14	Predicted	1.4	14	7	10
	Actual: End of Panel	<0.75	<12*	<4	<4
LW 15	Predicted	1.5	14	7	10
	Actual: End of Panel	0.73	≈10	3	7

* Includes unconventional subsidence effects

The main subsidence impacts observed from the mining of Longwall 14 are minor cracking of the surface, generally within the panel footprint, and areas of minor ponding. Minor impacts were reported by SCT to the Mount Owen Railway Line, Bettys Creek bridges and associated infrastructure occurred which were consistent with expectations and less than the maxima forecast specified in the projects' environmental assessments.

5.4.2 Incidents

A review of incidents logged in CMO during the audit period was conducted. No reportable incidents or internal incidents were recorded during the audit period in relation to subsidence. No evidence of a reportable incident having occurred during the audit period was observed by the auditors.

5.4.3 Complaints

No complaints were received in relation to subsidence at Integra UG during the audit period.

6.0 Adequacy of Surface Water Management

6.1 Surface Water Management Plan

Integra prepared the site wide Water Management Plan (WMP) to comply with the requirements of Project Approval 08_0101 Schedule 3, Condition 31. The WMP has been developed to address water management related to Integra UG's extraction of the Middle Liddell seam for Longwalls 13-20 and covers existing and planned surface disturbance associated with the project. Included under the WMP is the following sub-plans:

- Erosion and Sediment Control Plan
- Surface Water Management Plan
- Groundwater Management Plan
- Surface and Groundwater Response Plan.

A Creek Diversion Management Plan is required to be developed for the proposed diversions of Bettys Creek and Main Creek. This had not been triggered at the time of the audit.

A revised WMP was approved during the audit period, following approval of modification 8 of PA 08_0101 on 10 September 2018 and again on the 24 May 2019 following updates made to the water sharing arrangements between Integra UG and Rix's Creek North.

Review of the site water management noted the following observations:

6.1.1 Ventilation Shaft 3

Construction of Ventilation Shaft 3 began in 2019 and is now complete and operational. The Water Management Plan is yet to be updated to reflect the water management aspects of the site. Surface water management at the Ventilation Shaft 3 includes:

- Construction of new hardstand and associated surface ventilation infrastructure
- Chemical storage (tanks) within dedicated bunded areas
- Facility drains to a new, lined sediment dam which is pumped to the Ventilation Shaft Dam.

Both the WMP and future reviews of the water balance model should be updated to reflect the completion and operation of this facility.

Visual inspection and documentation for this area noted that the sediment dam has been designed and constructed in accordance with the WMP and the consent with regards to the management of surface water. The sediment dam was:

- Sized using methods outlined in *Managing Urban Stormwater: Soils and Construction* (Landcom 2004),
- Designed and installed to include: a 2mm thick HDPE liner; rip rap scour protection of the spillway; and pumping infrastructure for transfer of captured runoff to the mine water system.

Concrete bunding of chemical storage has been installed. It was observed during the site inspection that a chemical leak / spill had been contained within the bund (Photo 6-3); site personnel noted that it would be reported, and action implemented.

IEA OFI 12: Update Pollution Incident Response Management Plan to document the handling, storage and incident response for storage of chemicals at Ventilation Shaft 3 (i.e. Solcenic Emulsion).

6.1.2 Bettys Creek Crossing

During the audit period, to service the construction and operation of Ventilation Shaft 3, construction of vehicle access and a power line was required to service the site. This servicing infrastructure required a crossing over Betty's Creek.

At the time of this audit, the works were complete, and inspection noted that works associated with the creek crossing and adjacent land were stable and showed minimal signs of disturbance or erosion.

6.1.3 Creek Diversions – bank stability and monitoring

Section 5.3 and Table 5-1 provides a Trigger Action Response Plan (TARP) which outlines corrective measures for stream geomorphological impacts observed during either minor or major monitoring of the Mount Owen Middle Bettys Creek Diversion and attributable to Integra Underground Operations.

Table 5-1 includes trigger and actions with regards to the stability of the channel bank and invert. It is observed that the trigger does not quantify what constitutes a 'significant increase' nor measures by which the rill erosion / slumping would be determined as attributable to Integra UG operations (or other factors).

Table 4 Trigger Action Response for channel and bank stability – Mount Owen Middle Bettys Creek Diversion

Aspect	Trigger	Action
Channel bank and invert	Increase in significant rill erosion or slumping	Where the erosion will continue to compromise the channel stability or adversely impact sediment transfer, remediation actions should be undertaken. Controls may include the application of sandbags, straw bales, jute mesh, silt fencing or similar. Diversion banks or drains may also be installed if appropriate. Should it be required, an appropriate fill material will be used to repair any damage. Remediation activities will be undertaken after consultation with any relevant stakeholders. Any remediation activities will be in accordance with 'The Blue Book – Managing Urban Stormwater: Soils and Construction'. Notify the Department. Any remediation actions will be determined and included within the annual major monitoring report. Remediation actions to be summarised and included within the Annual Review.

Annual Reviews in 2018 and 2019 both note that:

- Some evidence of minor erosion progression was observed at some of the monitoring points
- One additional erosion point was documented in the diversion during the May 2019 assessment
- Monitoring identified that some sections of the diversion are currently eroding and are vulnerable to further erosion with areas of significant erosion observed
- A number of cracks running parallel to the diversion were observed near the top of the left bank in the reach of the diversion between monitoring points MBD02 and MBD04.

The latest Annual Review (SLR, June 2020) comments that it is not clear what has caused the cracks however suggests that the cracks may have been caused by slumping following construction of the channel or historical mining activity (SLR, 2019).

IEA OFI 11: Update the WMP to remove ambiguity in how channel stability and erosion is identified in the WMP (for example, how is rill erosion or channel stability attributed to LW operations or otherwise). It is recommended the WMP include quantifiable triggers (i.e. define 'significant'), and details how actions are then communicated and jointly managed between Mount Owen and Integra UG.

6.1.4 Oil Water Separator – workshop areas and hydrocarbon storage

The workshop area includes an external hardstand area with chemical / hydrocarbon storage. Areas of the hardstand where chemical/hydrocarbon storage occur (Photo 6-13) drains to a sump (Photo 6-13, and 6-14), which it is understood is connected to an Oil Water Separator (OWS) (Photo 6-15). From the OWS, treated water is transferred to the nearby Process Water Dam Operation. The management and inspection of this system is currently not referenced in detailed in the WMP other than in general terms as being part of the dirty water system.

Outside the concrete kerb / bund containing spills and runoff to the sump is situated another grated inlet pit. Hydrocarbon staining was observed both outside the concrete bund and around the surface

of the OWS (Photo 6-14). In close proximity to this system is a well vegetated and stable clean water channel, separated by a ~400mm high earth bund. Visually, no hydrocarbon staining or other evidence of spills / discharge to the clean water drain was evident.

Evidence was sighted (Monthly Environmental Surface Inspection Checklist – completed 26/05/2020) documenting that regular visual inspections are carried out of the bund, bund drain, bund sump condition, spill kit and presence of hydrocarbon spills. However, it is noted that with the existing staining outside the bund, it would be currently problematic to visually determine if any new small spills have occurred within intervening inspection periods.

Hydrocarbon staining around the external pit and surface of the OWS and close proximity of the clean water drain may be indicative of a potential risk to the clean water system in the event of a system failure and / or heavy rainfall.

IEA OFI 09: Review the operation and capacity of the oil water separator at the workshop to manage rainfall and spill events in accordance with relevant EPA guidelines and standards. Implement any identified actions or controls accordingly

IEA OFI 10: Update the WMP to specifically describe the operation, inspection and management regime of stormwater, chemical containment, and oily water separators.

6.2 Surface Water Site Inspection Findings

The following photographs provide an indication of the observations made or referenced by the Surface Water specialist during the audit site inspection.

Table 5 Site Inspection Photographs

Photo #	Comment	Photograph
6-1	Ventilation Shaft 3 – newly constructed, lined sediment dam	

Photo #	Comment	Photograph
6-2	Ventilation Shaft 3 – newly constructed, lined sediment dam spillway	
6-3	Ventilation Shaft 3 – chemical storage tanks and bund. Spill / leak observed within bund.	

Photo #	Comment	Photograph
6-4	Mount Owen Middle Bettys Creek Diversion – rill erosion of banks	
6-5	Mount Owen Middle Bettys Creek Diversion – rill erosion of banks	
6-6	Gas Plant Sediment Dam	

Photo #	Comment	Photograph
6-7	North Sediment Dam	 A photograph showing a small, irregularly shaped pond of murky brown water. The pond is surrounded by dry, yellowish-brown grass and some green weeds. In the background, there are several tall, thin trees and a cloudy sky. A metal pole and a curved metal pipe are visible in the foreground on the left.
6-8	Ventilation Shaft Dam	 A photograph of a larger, rectangular pond of murky brown water. The pond is surrounded by tall, green reeds and grasses in the foreground. In the background, there is a line of trees and a cloudy sky.
6-9	South Sediment Dam	 A photograph of a small, rectangular pond of murky brown water. The pond is surrounded by dry, yellowish-brown grass and some green weeds. In the background, there are several tall, thin trees and a cloudy sky. A gravel path is visible in the foreground on the right.

Photo #	Comment	Photograph
6-10	Effluent treatment system	
6-11	Treated effluent pond	
6-12	Effluent irrigation area	

Photo #	Comment	Photograph
6-13	Chemical storage adjacent to workshop.	 A photograph showing several large white plastic drums (chemical storage) stacked on a metal platform next to a green corrugated metal building. A yellow hose is coiled on the ground in the foreground, and a metal grate is visible near the drums.
6-14	Oil Water Separator adjacent to banded workshop area.	 A photograph showing an oil-water separator system. Two green rectangular covers are visible in the foreground, labeled 'CS-0032' and 'CS-0031'. Piping and a yellow pump are visible in the background, adjacent to a green corrugated metal building.

Photo #	Comment	Photograph
6-15	Chemical storage near workshop – bund and sump. Note clean water channel in background. No visual evidence of spills or discharge from this area were observed in the clean water channel.	
6-16	Portal Sump – including extraction pump	

Photo #	Comment	Photograph
6-17	Portal Sump	

7.0 Adequacy of Groundwater Management

A review of the implementation of the management measures outlined in the Groundwater Management Plan was conducted as part of the IEA. The following was identified.

7.1 Groundwater Monitoring

Groundwater monitoring is conducted in accordance with the site-wide WMP. Bi-monthly groundwater sampling results are summarised in the quarterly environmental monitoring reports. Monitoring data collected during the audit period, and reviewed by the groundwater specialist, was reflective of the monitoring requirements outlined in the Groundwater Monitoring Program.

A number of exceedances of trigger values outlined in the WMP were identified during the audit period. Where exceedances are identified Integra UG engage external consultant GeoTerra to conduct an independent investigation. A summary of trigger exceedances and independent investigations conducted is provided in 4.4.

7.2 Glennies Creek and Station Creek Alluvial Aquifers

Integra UG maintain a groundwater monitoring program which includes assessment of potential impacts to groundwater dependent ecosystems associated with the Glennies Creek alluvial aquifer. Trigger limits were reached for pH and electrical conductivity at monitoring point GCP9 which includes Glennies and Station Creek Alluviums. External consultants GeoTerra conducted investigations into the groundwater trigger exceedances. In all instances the investigations concluded that these results are not considered to be associated with Integra UG's operations. The audit did not involve on site monitoring and therefore the audit findings must rely on the technical data collected by Integra UG's external subsidence consultants. The audit team did not identify any evidence which invalidated the groundwater or subsidence monitoring data or investigations conducted in response to trigger exceedances.

The auditors reviewed the bi-monthly subsidence reports prepared by SCT, a sample of weekly subsidence inspection forms, six monthly subsidence reports prepared by SCT as well as groundwater monitoring data. No evidence was obtained which indicates anything other than negligible impacts to the Glennies Creek alluvial aquifer.

7.3 Summary

The groundwater management plan details Integra's requirements and methodology for monitoring the bore network in a clear and efficient manner, as well the response measures should an exceedance of trigger levels for water level and groundwater quality occur. Evidence reviewed indicated that the groundwater management plan and associated monitoring program was effectively being implemented during the audit period.

The auditor does note that Section 8.1.1 of the WMP states that *an investigation into the high salinity observed in the alluvial aquifers (particularly Bettys Creek) will be undertaken in 2017*. The WMP should be updated to reflect the results from this assessment, namely the identification of any impacts on surrounding groundwater dependant ecosystems, private groundwater extractors and the salinity values of the Hunter salinity trading scheme.

IEA OFI 25: *The WMP should be updated to reflect the results from the investigation into the high salinity observed in the alluvial aquifers conducted in 2017.*

8.0 Adequacy of Biodiversity Management

A review of the implementation of the management measures outlined in the Biodiversity Management Plan was conducted as part of the IEA. The following was identified.

8.1 Compensatory Planting

8.1.1 Modification 7

Modification 7 approved the construction of a water pipeline from Integra UG to the MOC. In 2017 six established *Casuarina glauca* trees were identified for removal in the Bettys Creek riparian area. Integra UG engaged Umwelt to conduct pre-clearance surveys of the area in order to identify habitat trees. Four habitat trees were identified outside of the proposed pipeline alignment, which were subsequently avoided during construction of the pipeline.

In accordance with schedule 3 condition 32A of PA 08_0101, ten like-for-like trees must be planted and maintained for every established tree removed during construction of the water pipeline infrastructure. Integra engaged Enright Land Management to obtain and plant 100 *Casuarina glauca* seedlings in January 2018 to account for the 60 trees required (noting that some may not survive).

Inspection of the plantings identified that of the originally planted 100 trees approx. 75% had failed and as a result additional planting was conducted by Enright in October 2020. Planting failure has been attributed to the dry climatic conditions experienced following the initial planting.

Tube stock planted in 2020, as well as the surviving approximately 25 originally planted trees, were sighted during the audit inspection.

8.1.2 Modification 8

Modification 8 approved the extension of longwall mining up to Longwall 20 and required additional ancillary surface infrastructure to be constructed, including the construction of 3.6 km of 11 kV powerline.

External contractor ARA were contracted to conduct land clearing for the construction associated with modification 8. ARA identified that 1,360 established *Casuarina glauca* trees were required to be removed. Removal of the trees was conducted in October 2019 in accordance with Integra UG's GDP process and included the conduct of pre-clearance surveys to confirm the location of any habitat trees which required avoidance during land clearing works.

At the conclusion of the 2020 audit period all tree clearing, and construction associated with Modification 8 was completed. Integra was in the process of engaging an external consultant to conduct compensatory tree planting works, being ten trees for each tree removed, as per schedule 3 condition 32A of PA 08_0101. 13,800 *Casuarina glauca* seedlings are scheduled to be planted within the next six months, pending suitable climatic conditions.

8.2 Ecological Monitoring

Integra UG have engaged SLR Consulting to conduct baseline ecological monitoring in accordance with the BMP, the IUG LW 13-15 Extraction Plan and the IUG LW 15-16 Extraction Plan. Baseline monitoring was conducted for Longwalls 13 and 14 in 2017, prior to the audit period commencing. It is noted that the BMP does not specify the monitoring sites (including reference sites) which are referenced in the monitoring reports.

Ongoing monitoring of vegetation and subsidence effects has been conducted by SLR since 2017. The auditors reviewed the ecological monitoring reports prepared by SLR Consulting (SLR) for the monitoring conducted during the audit period. This included the following reports:

- Baseline Ecological Monitoring Report LW13 and LW14 2017 (SLR, 2017)
- Integra UG Longwall 13 and LW 14 Biodiversity Monitoring Report 1 2018 (SLR, 2019)
- Integra UG Biodiversity Review - LW15 to 20 (SLR, November 2019)
- Integra UG LW 13-15 Biodiversity Monitoring 2019 (SLR, 2019)

- Integra UG LW 13-14 Biodiversity Monitoring 2020 (SLR, 2020).

A review was conducted of the field data and reports summarising the biodiversity monitoring undertaken during the audit period. Monitoring was verified to have been conducted in accordance with the required monitoring outlined in the BMP, and as summarised in Section 3.3. It is noted that Section 4.2 of the BMP does not specifically detail the name and location of the monitoring sites included in ecological monitoring.

Monitoring conducted by SLR involved collection of plots in accordance with Biobanking Assessment Methodology (BBAM) and random meanders to search for evidence of subsidence impacts caused by longwall mining. Due to the ecological impacts predicted by SLR in 2017 biodiversity monitoring was conducted within the predicted subsidence zone of Longwalls 13 and 14. Previous environmental assessments concluded that minimal impacts were predicted to occur as a result of mining of Longwalls 15 and 16 and a lack of biodiversity values occur above Longwalls 15 to 20. Therefore, the biodiversity monitoring program in place is targeted to areas predicted to be affected by subsidence impacts and does not include Longwalls 15 and 16.

In 2019 Integra UG engaged SLR to further validate the biodiversity monitoring program in place. SLR conducted a desktop and literature review to assess the biodiversity values above LW15 to 20 in order to determine if there were ecological features that would be captured in ecological monitoring above these longwalls. The review concluded that, while biodiversity monitoring using Biobanking Assessment Methodology could be possible within the areas of vegetation present above Longwalls 15 to 20, the vegetation present was not considered to be a sensitive ecological feature, as defined within the approved BMP. Therefore the review concluded that biodiversity monitoring should continue to be conducted in accordance with the requirements of the BMP and that future monitoring is recommended on the biodiversity values of Ravensworth State Forest and the Southern Remnant Biodiversity Offset Area in order to assess potential longwall mining impacts to these areas. Integra UG have committed to conducting ongoing subsidence monitoring within the Ravensworth State Forest and Southern Remnant Area, as per Section 4.2 of the BMP, in order to monitor impacts from subsidence. It is noted these areas were not an active subsidence zone during the audit period. Future surface monitoring requirements will be reviewed as longwall mining progresses in accordance with the mine's approved monitoring programs and response plans which have been prepared to address predicted impacts outlined in the mine's various environmental assessments.

A decline in BBAM plot scores was recorded in all monitoring events. SLR suggest that climatic variability and the existing disturbed nature of the Integra UG project area is a key contributing factor given the monitoring results show a decline in BBAM plot scores at both the control and impact sites. Despite this, the monitoring reports conclude that it is unclear if the decrease in flora diversity and abundance can be attributed to mining impacts.

The results of ecological monitoring are summarised in the Annual Reviews. The auditors conducted a review against the information summarised in the Annual Reviews and the data provided in the monitoring reports provided by SLR. No discrepancies in the information presented in the Annual Reviews compared to the data in the monitoring reports was identified.

IEA OFI 26: *It is recommended the BMP makes specific reference to the monitoring sites including reference sites. Locations of sites should be outlined including the monitoring site which was added in 2019 (SG03) and monitoring sites which were relocated (SB01).*

8.3 Weed and Pest Management

Integra UG have in place an internal Weed and Pest Action Plan (Integra UG, 2019). The action plan outlines weed and pest management measures to be implemented across the mine surface and was developed in accordance with the management measures outlined in the BMP.

Integra UG engaged Enright Land Management to conduct weed and pest management services during the audit period. An annual completed weed works report is prepared by Enright which summarises the weed and pest work conducted as part of the ongoing weed control program. While the annual completed weed works reports are considered adequate at detailing the progress of weed management, the following improvements could be made to the reporting:

- The location of weed control activities could be better noted within Table 1 for each weed.

- The months in which weeds were treated should be noted to allow consideration of the effectiveness of weed control effort
- For each weed, the report should note if the same location(s) have been treated for the same weed species within the past five years. This will allow the effectiveness of control methods to be evaluated and for future control strategies to be better targeted
- The success of weed control activities for each species, both within the current year and previous years, could be outlined in Table 1
- Mapping: some colours shown on maps are not included in legends, or are difficult to discern. Indication of the month of treatment in the legend would be helpful.
- Mapping: A separate map indicating weed treatment priority areas in the coming year would allow better tracking of progress. This should also outline and discuss any areas of new infestations recorded, and their reasons e.g. disturbance due to specific construction.

Implementation of the above recommendations would provide a broader understanding of weed works conducted and planned ongoing works.

The site inspection identified Spear Thistle (*Cirsium vulgare*) and Galenia (*Galenia pubescens*) infestations in open grasslands along disturbed areas of ground close to GW 11-8. Evidence of weed management was sighted in various other locations across the mine surface and it is understood that Enright were conducting progressive ongoing weed management of Spear Thistle and Galenia using foliar spray methods.

Pest management was conducted during the audit period by Enright to manage wild dogs and fox populations. Specifically, 1080 wild dog and fox baiting programs were carried out in 2019. Additional baiting programs were recommended to be carried out biannually on site.

No evidence of vertebrate pests was sighted during the audit inspection however it is noted that the site inspection was not a targeted ecological inspection.

IEA OFI 27: While the annual completed weed works reports are considered adequate at detailing the progress of weed management, the following improvements could be made to the reporting:

- The location of weed control activities could be better noted within Table 1 for each weed.
- The months in which weeds were treated should be noted to allow consideration of the effectiveness of weed control effort
- For each weed, the report should if the same location(s) have been treated for the same weed species within the past five years. This will allow the effectiveness of control methods to be evaluated and for future control strategies to be better targeted
- The success of weed control works for each species, both within the current year and previous years, could be outlined in Table 1
- Mapping: some colours shown on maps are not included in legends, or are difficult to discern. Indication of the month of treatment in the legend would be helpful.
- Mapping: A separate map indicating weed treatment priority areas in the coming year would allow better tracking of progress. This should also outline and discuss any areas of new infestations recorded, and their reasons e.g. disturbance due to specific construction.

8.4 Aquatic Stream Health

SLR was engaged by Integra UG during the audit period to conduct channel stability and stream health monitoring of the Bettys Creek diversion in areas that were to be potentially affected by Integra UG Longwalls 13 – 15. This monitoring was to be undertaken in accordance with the PA 08_0101 Schedule 3 Condition 29, the Integra UG Water Management Plan and the Integra UG Bettys Creek Diversion Asset Management Plan.

Channel stability monitoring for the Mount Owen Middle Bettys Creek Diversion has been conducted at the following times by SLR:

- May 2017 – baseline monitoring was conducted (outside of the audit period)
- May 2018 – prior to carrying out second workings for LW 14 which commenced on 07 September 2020
- October 2018 – within 6 months of completing the second workings of LW 13 which were completed on 10 August 2018
- May 2019 – prior to carrying out second workings for LW 15 which commenced on 19 September 2019
- October 2019 – within 6 months of completing the second workings of LW 14 which were completed on 17 August 2019
- June 2020 – within 6 months of completing the second workings of LW 15 which were completed on 05 May 2020.

A summary of the assessed Rapid Appraisal of Riparian Condition index and CSIRO Ephemeral Stream Assessment classifications from each monitoring location within the Mount Owen Middle Bettys Creek Diversion and the natural channel of Bettys Creek collected during the audit period is provided in Table 6 below. The locations for each monitoring point are summarised in the Integra UG Bettys Creek Diversion Asset Management Plan.

Table 6 Bettys Creek Monitoring Results Summary

Site	May 2018	Oct 2018	May 2019	Oct 2019	May 2020	CSIRO Ephemeral Stream Ass. Classification
MDB1	Very Poor	Very Poor	Very Poor	Poor Average	Poor	Very Stable
MDB2	Very Poor	Very Poor	Very Poor	Poor	Poor	Potentially Stabilising
MDB3	Very Poor	Very Poor	Very Poor	Very Poor	Very Poor	Potentially Stabilising
MDB4	Very Poor	Very Poor	Very Poor	Very Poor	Very Poor	Potentially Stabilising
MDB5	Very Poor	Very Poor	Very Poor	Very Poor	Very Poor	Very Stable
MDB6	Very Poor	Very Poor	Very Poor	Very Poor	Very Poor	Potentially Stabilising
MDB7	Monitoring point no longer exists due to mining progression of Mount Owen Mine					
BC1	Very Poor	Very Poor	Very Poor	Very Poor	Very Poor	Stable
BC2	Poor	Poor	Average	Average	Average	Stable
BC3	Poor	Poor	Poor	Average	Good	Stable

Sites with a CSIRO ephemeral stream assessment classification of 'potentially stabilising' were generally supported by site observations that suggest the existing erosion or condition of the site is not getting worse and may be stabilising.

The results of the June 2020 Bettys Creek diversion channel stability and stream health monitoring indicates that the majority of monitoring points have experienced no apparent change from what was observed during the October 2019 assessment. SLR did not identify evidence which indicates that the rill/gully erosion identified in the Mount Owen Middle Bettys Creek Diversion primarily located above Longwall 14 were the result of Integra UG's operations.

8.5 Ground Disturbance Permit Process

A summary of the GDP process is provided in the 2020 IEA main report.

Review of GDPs approved during the audit period indicated that Integra UG's GDP process was being adequately implemented during the audit period with regards to biodiversity management and the conduct of pre-clearance surveys and specialist oversight provided by qualified ecologists.

8.6 Subsidence

Subsidence monitoring and remediation is managed in accordance with the following:

- Integra Underground Longwalls 15 and 16 Extraction Plan, INTUG-793190785-2055, Version 1.1 dated 08 August 2019 (EP LW 15-16)
- Integra Underground Longwalls 13 and 14 Extraction Plan, INTUG-793190785-151, Version 3.0 dated 11 August 2017 (EP LW 13-14)

Subsidence predictions across Bettys Creek were made in the 2017 Subsidence Impact Assessment prepared by SCT. They include troughs of up to a maximum of 1.9 deep and 260 m wide, with previous data predicting actual subsidence up to 80% of the maximum predicted values.

As reported by the audit, specialist subsidence monitoring reports prepared by SCT have reported minor cracking in the bed of Bettys Creek and minor ponding in the Bettys Creek diversion. The reports concluded that no significant subsidence impacts from mining of Longwalls 13 and 14 were reported at the Bettys Creek diversion and that identified impacts were below predicted subsidence parameters. The identified minor changes to Bettys Creek are not considered to be an impact of subsidence from Integra UG's longwall mining.

Subsidence impacts identified during the audit period were consistent with expectations and less than the maxima forecast specified in the projects' environmental assessments.

8.7 Visual Inspections

Monthly visual surface inspections are conducted by representatives from the Integra UG E&C department. The inspections are a requirement of the BMP and include a visual inspection of all surface areas under the management of Integra UG. Completed inspections and identified actions from the inspections are entered into Integra's compliance tracking system CMO and were sighted during the audit inspection.

8.8 Rehabilitation Monitoring

Rehabilitation is managed in accordance with the Integra UG Mining Operations Plan, however monitoring of rehabilitated areas is a requirement of the BMP and as such has been included in the implementation review of the BMP.

Annual rehabilitation monitoring was conducted by Umwelt in 2018 and 2019. Rehabilitation monitoring for 2020 had not been conducted at the time of the audit inspection. The auditors reviewed the rehabilitation monitoring reports prepared by Umwelt for the 2018 and 2019 monitoring periods as well as GIS data showing rehabilitated and disturbed land across the Integra UG surface area in 2020.

A review of rehabilitation monitoring conducted in accordance with the Mining Operations Plan was conducted as part of the IEA. Results from the review are provided in the Project Approval checklist against Schedule 3 Condition 40 of PA 08_0101 (Refer Appendix B) and Section 6.1.10 of the IEA Report. A summary of rehabilitation progress and monitoring is provided in Section 8 of the Annual Review. The Annual Review states that three general types of rehabilitation works have been completed across Integra Underground to date:

- Woodland rehabilitation areas in the rehabilitation overburden emplacement area
- Gas well rehabilitation sites
- Creek crossings where rehabilitation was required at Main Creek and Bettys Creek following the installation of the Mount Owen Mine Water Pipeline and gas drainage pipeline.

A summary of the rehabilitation status for gas well rehabilitation sites is provided in the Annual Review however the Annual Review does not include a summary of the status of rehabilitation in the woodland rehabilitation areas or the creek crossings which relate specifically to the construction conducted as part of modification 7.

IEA OFI 13: *It is suggested that the Annual Review report on the status of all rehabilitation conducted across Integra in particular rehabilitation of woodland rehabilitation areas and creek crossing rehabilitation.*

8.9 Biodiversity Site Inspection Findings

The following photographs provide an indication of the observations made or referenced by the Biodiversity specialist during the audit site inspection.

Table 7 Site Inspection Photographs

Photo #	Comment	Photograph
8-18	Bettys Creek ephemeral stream showing rill/gully erosion	
8-19	Bettys Creek ephemeral stream showing rill/gully erosion	

Photo #	Comment	Photograph
8-20	Bettys Creek and Bettys Creek bridge	
8-21	Tube stock plantings at Bettys Creek. A requirement following construction of MOD 7 water sharing pipeline	

Photo #	Comment	Photograph
8-22	Spear Thistle (<i>Cirsium vulgare</i>) and Galenia (<i>Galenia pubescens</i>) infestations sighted in open grasslands along disturbed areas of ground.	

9.0 Adequacy of Subsidence Management

The IUG EP LW13-14 was conditionally approved by the Department on 06 April 2017 prior to secondary extraction of Longwall 13 commencing on 23 May 2017. The Department formally approved the updated Extraction Plan for Longwalls 13-14 on 11 August 2017.

The IUG EP LW15-16 was formally approved by the Department on 16 August 2019 with secondary extraction of Longwall 15 commencing production on 19 September 2019.

Development of both Extraction Plans was conducted in accordance with the Guidelines for the Preparation of Extraction Plans (NSW Resources Regulator (RR), 2015), as verified by approval from the RR.

IUG EP LW13-14 was last reviewed on 11 August 2017 and was due for review on 11 August 2020.

IEA OFI 23: *Ensure the Integra UG LW13-14 EP is reviewed in accordance with the specified review date on the plan.*

9.1 Coal Resource Recovery Plan

A separate Coal Resource Recovery plan (CRRP) was prepared in accordance with Schedule 3, Condition 20 of MP 08_0101 as a component of both the Extraction Plans for Longwalls 13-14 and Longwalls 15-16.

The implementation of the CCRP is assessed through review of the Subsidence Monitoring Programs, Built Features Management Plan, specific asset management plans and environmental management plans.

9.2 Subsidence Monitoring Program

The separate Subsidence Monitoring Programs contained within each Extraction Plan summarise the overall monitoring of mining impacts on the natural and built environments, with management actions detailed in the relevant environmental management plans.

Site-wide subsidence monitoring and reporting conducted during the audit period include:

- Weekly visual subsidence surface inspections conducted by Integra's Environment and Community (E&C) department
- Survey monitoring conducted in accordance with the subsidence monitoring program
- Real-time monitoring conducted during the period of active subsidence of the Mount Owen Railway Line and Bettys Creek bridges in accordance with the Mount Owen Railway and Bettys Creek Bridges Asset Management Plan
- Bi-monthly reporting conducted by external consultant SCT during the audit period
- Six-monthly reporting conducted by external consultant SCT during the audit period
- Annual reporting provided in the Annual Review.

9.2.1 Subsidence Monitoring Lines

A review of the subsidence monitoring lines referenced in EP LW13-14 and EP LW15-16 was conducted against the monitoring reports prepared by external consultants SCT Operations Pty Ltd (SCT) and Mine Subsidence Engineering Consultants Pty Ltd (MSEC). The purpose of this review was to verify that the monitoring commitments made in the management plans were complied with during the audit period and to confirm the monitoring results presented in the Annual Reviews are consistent with the data provided in the subsidence monitoring reports. A summary of the review conducted against each subsidence monitoring line is provided in Table 8.

Table 8 Review of Monitoring Lines

Monitoring Line	Monitoring requirements	Comments
PH-Line (H Line)	Base Surveys, Weekly surveys of required mining progress and end of panel survey Applicable to: Longwalls 13-16 Referenced in: IUG EP LW13-14 Mt Owen Railway and Bettys Creek Bridges Asset Management Plan Mt Owen Railway and Bettys Creek Bridges Asset Management Plan Integra Longwalls 15 and 16	Monitoring of the PH-Line was conducted by MSEC during the audit period. Monitoring was conducted in accordance with the approved management plans. The H Line referenced in the EP LW13-14 Subsidence Monitoring Program was renamed the PH Line and is referenced as such in the Integra UG EP LW13-14 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan. Comparison of figures from the two plans shows that the monitoring lines, PH and H, are the same. The line has been extended as mining has progressed, as is committed to in the EP LW13-14 Subsidence Monitoring Program. The End of Panel Report for Longwall 15, prepared by SCT in 2020, states that the H Line has been replaced by the PH line marks. It is not clear when or for what reason the name change of the H Line occurred.
G Line Extension	Baseline Survey and Completion Survey Applicable to: Longwalls 13-14 Referenced in: LW13 and 14 Eastern Rail Pit Asset Management Plan	Monitoring of the G Line was conducted by SCT during the audit period. Monitoring was conducted in accordance with the approved management plans. The EP LW13-14 Subsidence Monitoring Program (Table 5-1) states that the frequency of monitoring for the G Line is as per the Mt Owen Railway and Bettys Creek Bridges Asset Management Plan. However, this plan does not reference the G line. The G Line is only referenced in the Eastern Rail Pit Management Plan.
P Line	Baseline Survey and Completion Survey Applicable to: Longwalls 13-14 Referenced in: LW13 and 14 Eastern Rail Pit Asset Management Plan	Monitoring of the P Line was conducted by SCT during the audit period. Monitoring was conducted in accordance with the approved management plans. The EP LW13-14 Subsidence Monitoring Program (Table 5-1) states that the frequency of monitoring for the P Line is as per the Mt Owen Railway and Bettys Creek Bridges Asset Management Plan. However, this plan does not reference the P line. The P Line is intended to determine subsidence mid panel for key features such as Bettys Creek. The P Line is not clearly referred to in any management plan however monitoring reports, prepared by SCT, show that the P Line is what is referred to as the 'unnamed line', which lies parallel to the G Line, detailed in Figure 3-1 of the Subsidence Monitoring Program.

Monitoring Line	Monitoring requirements	Comments
		The P Line is also referred to as the 'additional line' in the Eastern Rail Pit Management Plan.
Survey Points along the eastern edge of the ERP	Baseline Survey and Completion Survey Applicable to: Longwalls 13-14 Referenced in: LW13 and 14 Eastern Rail Pit Asset Management Plan	Monitoring of the ERP Survey Points was conducted by SCT during the audit period. Monitoring was conducted in accordance with the approved management plans.
R Line	Additional line not outlined in management plans Applicable to: Longwalls 13-16	Monitoring of the R Line was conducted by SCT during the audit period. The R Line is an additional monitoring line which was placed on the South Western side of the rail line to make use of the natural surface in this area. The auditors were informed that the set-up of the R Line was undertaken in consultation with an Inspector of Mine Subsidence, NSW Resource Regulator however the auditors did not sight documented evidence to verify this. No reference to R Line is made in the Extraction Plans or associated sub plans.
MB15 Line	Short term monitoring installation used to survey Longwall 15 Referenced in: Integra UG EP LW 15-16 Subsidence Monitoring	Monitoring of the MB15 Line was conducted by SCT during the audit period. Monitoring was conducted in accordance with the approved management plans. The MB15 Line was a short-term monitoring line, which complemented monitoring of the Mount Owen North Pit highwall. While not specifically referenced in the Integra UG EP LW 15-16 Subsidence Monitoring Program, reference is made to "an array of survey points near the Mt Owen – North Pit highwall".
Shaft 3 Line	Pre mining of Longwall 15 and at intervals to compliment planned monitoring Applicable to: Longwall 15 Referenced in: Integra UG EP LW 15-16 Subsidence Monitoring	Monitoring of the Shaft 3 Line was conducted by SCT during the audit period. Monitoring was conducted in accordance with the approved management plans.
Ravensworth East – West Pit	Pre and post mining of Longwalls Applicable to: Longwalls 15-16	Monitoring of the Ravensworth East – West Pit Line was conducted by SCT during the audit period. Monitoring was conducted in accordance with the approved management plans.

Monitoring Line	Monitoring requirements	Comments
	Referenced in: Integra UG EP LW 15-16 Subsidence Monitoring	

9.2.2 Monitoring Summary

A review of subsidence monitoring results for the audit period was conducted as part of the IEA. This included review of the following:

- Bi-monthly subsidence reports prepared by SCT
- Six-monthly subsidence reports prepared by SCT
- Subsidence monitoring reports prepared by MSEC for the for the Mt Owen Railway Line, Bettys Creek Bridges and associated infrastructure
- Bi-monthly geotechnical engineering reports prepared by IUG
- Weekly subsidence inspection forms completed by IUG.

The primary subsidence impacts observed during subsidence inspections conducted during the audit period in relation to Longwalls 13 and 14 include the following:

- Settlement of the ground, minor cracking and ponding near earthworks for gas drainage installations
- Minor ponding in the Mount Owen Bettys Creek Middle Diversion Channel
- Minor cracking on the surface over the panel footprint including within the bed of Bettys Creek

The observed subsidence impacts are consistent with those predicted in the Subsidence Impact Assessment Reports prepared for the project and as outlined in the relevant sections of the Integra UG Longwall EP13-14.

IEA OFI 22: *It is suggested that the survey lines referenced in the Integra UG EP LW13-14 Subsidence Monitoring Program should be consistent with those being monitored. Reference should be made to the R Line and PH Line in the Subsidence Monitoring Program.*

The primary subsidence impacts observed during subsidence inspections conducted during the audit period in relation to Longwalls 13 and 14 include the following:

- Minor cracking near the edges of the panels
- Changes to the landform above the panels causing minor ponding after rainfall
- Minor sinkholes in the western emplacement area (SCT state that these impacts may not be subsidence-related however and may be the result of normal settlement of fill material)

The observed subsidence impacts are consistent with those predicted in the Subsidence Impact Assessment Reports prepared for the project and as outlined in the relevant sections of the Integra UG EP LW 15-16.

Results from the review against monitoring conducted as required by each sub plan under the UG EP LW13-14 and UG EP LW15-16 is outlined in the sections below.

IEA OFI 24: *It is suggested that the survey lines referenced in the IUG EP LW15-16 Subsidence Monitoring Program be consistent with those being monitored. Reference should be made to the R Line in the Subsidence Monitoring Program. A consolidated plan showing all survey lines discussed above should be provided in the Integra UG EP LW 15-16 Subsidence Monitoring Program.*

IEA OFI 28: *It is suggested that the extent of LiDAR is identified on monitoring figures within the extraction plans.*

9.2.3 Conclusion

Key performance indicators are summarised in Section 4.2 of both Subsidence Monitoring Programs. Based on monitoring data collected by Integra and external subsidence specialists throughout the audit period the subsidence impacts recorded are below the key performance measures for the primary conventional subsidence parameters outlined in the Subsidence Monitoring Programs.

As outlined in Table 8 some inconsistencies were identified across the various management plans with regards to the way in which the subsidence monitoring lines were being referenced. While discrepancies were identified, it is concluded that the monitoring lines outlined in the approved monitoring programs were adequately monitored in accordance with the programs. An additional monitoring line, the R line, was implemented during the audit period however this additional line was not implemented as a replacement to any lines outlined in the Monitoring Program.

IEA OFI 29: Update Table 4-1 of the IUG EP LW15-16 Subsidence Monitoring Program to ensure it refers to both Longwall 15 and Longwall 16.

9.3 Public Safety Management Plan

The Integra UG Public Safety Management Plans for Longwalls 13-14 and Longwalls 15-16 was developed to detail the management measures to minimise surface safety risks to the public during mining within the Extraction Plan Areas.

Key controls outlined in the Integra UG Public Safety Management Plans include weekly surface subsidence inspections conducted by Integra's E&C department and the implementation of the management measures outlined in the sub plans under the Extraction Plan. Evidence of weekly surface subsidence inspections being undertaken during the audit period was verified by the auditors.

Monitoring data and subsidence reporting reviewed during the audit indicate that there has been no increased risk to public safety in the mining area caused by subsidence impacts or any exceedances of subsidence monitoring criteria. It is noted that all surface land and infrastructure in the vicinity of Longwalls 13-16 is owned by Glencore and not readily accessible to the general public.

9.4 Land Management Plan

A Land Management Plan was developed for both the Integra UG EP LW 13-14 and Integra UG EP LW 15-16. The plan is required to be developed in consultation with the relevant landowners. It is noted that the land within the Extraction Plan Area for Longwalls 13-16 is owned by Glencore, with consultation undertaken with Mount Owen (a Glencore mine) for both overall Extraction Plans.

Key monitoring requirements from the Integra UG EP Land Management Plan for Longwalls 13-14 and 15-16 relate to Bettys Creek and the Mount Owen Bettys Creek Diversion. Implementation of the monitoring required under the Integra UG EP Land Management Plan for Longwalls 13-14 and 15-16 has been assessed as part of the review of the Subsidence Monitoring Program, the Public Safety Management Plan and the Bettys Creek Diversion Asset Management Plan.

The Integra extraction surface area is heavily disturbed, with most vegetation relating to mine site rehabilitation from Mount Owen. In addition, progressive mining and disturbance from the Mount Owen Complex (MOC) is predicted to cause reduction of some land management values, as detailed in the Integra UG EP Land Management Plans. A review of biodiversity and water management on site has been conducted by the biodiversity and surface and groundwater specialists. The findings from these specialists in conjunction with the subsidence monitoring results indicate that Integra is complying with the performance indicators outlined in the Land Management Plans.

9.5 Built Features Management Plan LW 15-16

The Integra UG EP LW15-16 Built Features Management Plan was prepared to address predicted subsidence impacts to built features as a result of underground mining of Longwalls 15 and 16. Specific asset management plans have been developed as part of the LW15-16 Built Features Management Plan, including:

- Mount Owen Railway and Bettys Creek Bridges Asset Management Plan

- Mount Owen mine Key Features Asset Management Plan
- Subsidence Management Protocol

Monitoring requirements are outlined in the specific subplans under the LW15-16 Built Features Management Plan and have been assessed in the relevant sections below.

9.5.1 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan

Subsidence impacts to the Mount Owen Railway Line and Bettys Creek bridges are managed in accordance with the LW15-16 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan prepared by Integra with input provided by external consultants Mine Subsidence Engineering Consultants Pty Ltd (MSEC), SCT, Pidgeon Civil Engineering, Lynton Surveys, Laing O'Rourke, Pacific National and Freightliner as well as MOC.

The surface infrastructure covered in the plan includes the:

- Railway (i.e. track, sleepers, ballast and switch)
- Bridges (i.e. railway and service road bridges across Bettys Creek)
- embankment
- drainage culvert
- signal line
- water pipeline
- service road
- boundary fences.

Key management measures verified as having been implemented during the audit period include the following:

- **Engineering maintenance** activities implemented to mitigate the expected subsidence effects, these include a rail expansion switch, an initial track stress free temperature adjustment and an initial bridge adjustment.
- **Subsidence Surveys:**
 - PH Line and Bridge 3D monitoring base survey conducted 500m before first rail contact (note mining at Longwall 16 had not triggered this requirement during the audit period)
 - PH Line and Bridge 3D monitoring Final surveys conducted 3 months after the completion of longwall mining (note mining at Longwall 16 had not triggered this requirement during the audit period)
 - Overall End of Panel reports prepared 3 months after the completion of longwall mining (note mining at Longwall 16 had not triggered this requirement during the audit period)
- **Rail Monitoring:**
 - Ground movements along the alignment of the railway are monitored using the PH Line which was extended to capture subsidence impacts generated from mining of Longwalls 15 and 16. PH Line surveys are required to be conducted weekly once mining reaches 250m before first rail contact for Longwall 15 and 100m before first rail contact for Longwall 16 and until 250m past last rail contact.
 - Temperature and strain gauges were previously installed for the monitoring of Longwalls 13 and 14 and were subsequently extended to capture monitoring for Longwalls 15 and 16. Temperature and strain gauge monitoring is real-time monitoring conducted until 3 months post completion of mining.

- Track geometry trolley surveys, a baseline geometry survey is required to be conducted 500m before first rail contact and then as required during mining.
- **Bridge Monitoring:** 3D monitoring points have been fixed to the abutments and tell-tales across the expansion joints at the Bettys Creek rail and road bridges to monitor movement of the bridges.
- **Visual Inspections:** Visual inspections are conducted weekly by external consultants. In addition, a weekly subsidence surface inspection is conducted by Integra's E&C department.
- **Technical Committee Meetings:** Mining progress and subsidence impacts are reviewed regularly by the established technical committee which comprises representatives from Integra, MOC, Laing O'Rourke, PCE, Lynton Surveys, MSEC and GHD.

The frequency of monitoring, inspections and meetings is defined in the longwall action plan which is provided in Section 10 of the LW15-16 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan.

Evidence obtained and reviewed validates that the LW15-16 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan was being adequately implemented at the time of the audit. It is noted that Integra have responsibility to notify MOC of longwall progress and to consult regularly with MOC. MOC is responsible for the conduct of subsidence surveys and monitoring as detailed in Section 10 of the LW15-16 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan. Integra obtain monitoring results for all monitoring conducted by MOC which are referenced in the bi-monthly and end of panel subsidence reports prepared by SCT on behalf of Integra.

9.5.2 Mount Owen Mine Key Features - Asset Management Plan

The Mount Owen Mine Key Features - Asset Management Plan for Longwalls 15 and 16 was prepared to manage the forecast subsidence impacts to select surface infrastructure and built features of the MOC mines from the planned mining of Longwalls 15 and 16 at Integra.

Control measures outlined in the Mount Owen Mine Key Features - Asset Management Plan for Longwalls 15 and 16 and confirmed to be generally implemented at the time of the audit site inspection include:

- Subsidence warning signage
- Weekly subsidence inspections conducted by Integra's E&C department
- Consistent communication with MOC regarding mining progress
- Repair of any impacts identified; the auditors were informed of one surface crack which required remediation by Integra.
- Monitoring in accordance with the IUG EP LW15-16 Subsidence Monitoring Program and the LW15-16 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan
- Survey monitoring of the Mount Owen – North Pit over Longwall 15 start pre-mining and after 500m of Longwall 15, as reported by SCT.
- Survey monitoring of the Ravensworth East West Pit pre and post mining of each longwall panel, as reported by SCT.
- Pre-mining inspection conducted by Integra for each longwall panel at the ERP, TP2, the Overburden emplacement areas and the sediment control dams.

Additional monitoring and inspections are conducted by MOC as outlined in Table 5-1 of the Mount Owen Mine Key Features - Asset Management Plan for Longwalls 15 and 16.

The Mount Owen Mine Key Features - Asset Management Plan for Longwalls 15 and 16 is a succinct and clearly outlined management plan which was considered to have been adequately implemented during the audit period.

9.5.3 Subsidence Management Protocol

Integra developed a 'Mount Owen – Integra Surface Access Protocol' to outline the responsibilities of all parties within the Integra / Mount Owen / Glendell Complex regarding subsidence management.

The protocol is referenced as Appendix C of the Integra UP EP LW15-16 Built Features Management Plan however the protocol is not available on the Integra Public Website however this document con.

9.6 Built Features Management Plan LW 13-14

The Integra UG EP LW13-14 Built Features Management Plan was prepared to address predicted subsidence impacts to built features as a result of underground mining of Longwalls 13 and 14. Specific asset management plans have been developed as part of the LW13-14 Built Features Management Plan, including:

- Mount Owen Railway and Bettys Creek Bridges Asset Management Plan
- Eastern Rail Pit Asset Management Plan
- Mount Owen TP2 Asset Management Plan
- Bettys Creek Diversion Asset Management Plan.

Monitoring requirements are outlined in the specific subplans under the LW13-14 Built Features Management Plan and have been assessed in the relevant sections below.

9.6.1 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan

The LW13-14 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan addresses the Railway, the Bridges and associated infrastructure due to the extraction of Longwalls 13 and 14. The surface infrastructure covered in the plan includes:

- Railway (i.e. track, sleepers and ballast)
- Bridges (i.e. railway and service road bridges across Bettys Creek)
- embankment
- drainage culvert
- signal line
- water pipeline
- service road
- boundary fences.

Key management measures verified as having been implemented during the audit period include the following:

- **Subsidence Surveys:**
 - PH Line and Bridge 3D monitoring base survey conducted 500m before first rail contact
 - PH Line and Bridge 3D monitoring Final surveys conducted 3 months after the completion of longwall mining
 - Overall End of Panel reports prepared 3 months after the completion of longwall mining.
- **Rail Monitoring:**
 - Ground movements along the alignment of the railway are monitored using the PH Line which was originally established for Longwall 12 and extended to capture subsidence impacts generated from mining of Longwalls 13 and 14. PH Line surveys are required to be conducted weekly once mining reaches 100m before first rail contact for and until 250m past last rail contact.

- Temperature and strain gauges were previously installed for the monitoring of Longwalls 12 by the previous mine operator and were subsequently extended further to the north to capture monitoring for Longwalls 13 and 14. Temperature and strain gauge monitoring is real-time monitoring conducted prior to the longwalls reaching a distance of 500m from the first rail contact and until 3 months post completion of mining.
- Geisma trolley monitoring, a baseline geometry survey is required to be conducted 500m before first rail contact, monthly from 250m before first rail contact and then weekly from 100m before first rail contact until mining is 250m past the first rail contact.
- **Bridge Monitoring:** 3D monitoring points have been fixed to the abutments and tell-tales across the expansion joints at the Bettys Creek rail and road bridges to monitor movements of the bridges. Baseline monitoring was conducted prior to the longwalls reaching a distance of 500m from the first rail contact. Bridge monitoring is required to be conducted weekly once mining reaches 100m before first rail contact for and until 250m past last rail contact.
- **Visual Inspections:** Visual inspections are conducted weekly by external consultants. In addition, a weekly subsidence surface inspection is conducted by the Integra E&C Department.
- **Technical Committee Meetings:** Mining progress and subsidence impacts are reviewed regularly by the established technical committee which comprises representatives from Integra, MOC, Laing O'Rourke, PCE, Lynton Surveys, MSEC and GHD.

The frequency of monitoring, inspections and meetings is defined in the longwall action plan which is provided in Section 10 of the LW13-14 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan.

Evidence obtained and reviewed validates that the LW13-14 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan was being adequately implemented at the time of the audit. As detailed in Section 9.5.1 above MOC is responsible for the conduct of subsidence surveys and monitoring under the LW15-16 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan.

9.6.2 Eastern Rail Pit Asset Management Plan

The Eastern Rail Pit (ERP) is a shallow, 35m deep, box cut pit at Mount Owen Mine excavated on the eastern side of the Mount Owen rail line. The box cut is almost wholly within the Extraction Plan area for Longwalls 13 and 14 at Integra Underground Mine. This pit is currently being filled and capped. Now only a small area of the original void remains unfilled and only sections of the western and northern highwalls are still exposed.

The ERP Asset Management Plan was developed as part of the LW13-14 Mount Owen Railway and Bettys Creek Bridges Asset Management Plan to identify and manage the subsidence impacts on the ERP caused by mining of Longwalls 13 and 14 at Integra UG.

The ERP Asset Management Plan states that the subsidence impacts on the ERP are predicted to be minimal and of limited consequence given the ERP is being backfilled and capped by Mount Owen. Key management measures implemented during the audit period in relation to the ERP include the following:

- Visual subsidence surface inspections carried at the following frequencies:
 - Baseline inspection before the start of Longwall13.
 - Monthly inspection during the mining of Longwall 13 directly below the void and until the longwall face is 500m past the southwestern edge of the void.
 - Weekly inspection during the mining of Longwall 14 during the period of mining directly under the open void section of the ERP until the longwall face is 500m past the southwestern edge of the void.

- Subsidence survey monitoring conducted utilising the G Line extension as detailed in Section 9.2.1.

Cracking around the perimeter of the ERP was identified from subsidence inspections and surveys. These cracks were concluded to have likely been caused by settlement of the fill material prior to mining of Longwalls 13 and 14 and were evident in historical photographs prior to 2014. In general, no stability issues have been identified during the audit period in relation to the ERP and subsidence monitoring data shows no significant increase in subsidence parameters predicted as part of the Modification 7 Environmental Assessment.

9.6.3 Mount Owen TP2 Asset Management Plan

The Mount Owen Tailings Pit 2 (TP2) is a substantially backfilled box cut pit at Mount Owen Mine excavated on the western side of the Mount Owen Rail Line. The box cut is partly within the Extraction Plan area for Longwalls 13 and 14 at Integra but almost entirely beyond a distance of half depth from the nearest goaf edge of Longwall 14. The majority of TP2 has been backfilled with overburden with the remaining void used as a water storage. TP2 is not used to store mine tailings.

The Mount Owen TP2 Asset Management Plan was developed to outline the subsidence impacts on TP2 from mining of Longwalls 13 and 14. Key management measures requiring to be implemented under this plan include:

- Baseline inspection before the commencement of mining of Longwall 13. This was conducted prior to the audit period commencing in November 2017.
- Monthly inspections conducted during mining of Longwall 13 and 4 until the longwall face is 500m past the southern tip of the void. Inspections are conducted by both Integra and MOC personnel.

The predicted subsidence impacts at TP2 are anticipated to be low and as such no additional survey monitoring for TP2 during the planned mining of Longwall 13 and 14 was required other than that recommended for the Mount Owen Rail Line and ERP.

The Mount Owen TP2 Asset Management Plan Trigger Action Response Plan (TARP) was not triggered during the audit period. Subsidence monitoring results as well as a review of visual inspections conducted during the audit period indicate the Mount Owen TP2 Asset Management Plan was being adequately implemented during the audit period. Bettys Creek Diversion Asset Management Plan.

The Bettys Creek Diversion Asset Management Plan was developed to address the requirements of Schedule 3 Condition 31 of PA 08_0101 and to further address the requirements of Schedule 3 Condition 20(g) of PA 08_0101 which requires the Extraction Plan to include a Water Management Plan which manages the potential impacts of subsidence on existing and proposed creek diversions.

Subsidence predictions across Bettys Creek were made in the 2017 Subsidence Impact Assessment prepared by SCT. They include troughs of up to a maximum of 1.9 deep and 260m wide with previous data predicting actual subsidence up to 80% of the maximum predicted values.

Subsidence monitoring reports prepared by SCT have reported minor cracking in the bed of Bettys Creek and minor ponding in the Bettys Creek diversion. The reports concluded that no significant subsidence impacts from mining of Longwalls 13 and 14 were reported at the Bettys Creek diversion and that identified impacts were below predicted subsidence parameters. SCT do not consider that the identified minor changes to Bettys Creek are an impact of subsidence from Integra UG's longwall mining.

As the majority of the management controls outlined in the Bettys Creek Diversion Asset Management Plan require stream health monitoring and inspections a technical review of the Bettys Creek Diversion Asset Management Plan was conducted by the IEA surface water specialist and is detailed in the corresponding report appended to the 2020 IEA report.

10.0 Limitations

AECOM Australia Pty Limited (AECOM) has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use of Integra and only those third parties who have been authorised in writing by AECOM to rely on this Report. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this Report.

It is prepared in accordance with the scope of work and for the purpose outlined in AECOM's proposal dated 03 September 2020. Where this report indicates that information has been provided to AECOM by third parties, AECOM has made no independent verification of this information except as expressly stated in the Report. AECOM assumes no liability for any inaccuracies in or omissions to that information.

This report was finalised on in January 2020 and is based on the conditions encountered and information reviewed at the time of preparation. AECOM disclaims responsibility for any changes that may have occurred after this time.

This report should be read in full and in conjunction with AECOMs audit report titled 'Independent Audit Report Integra Underground Coal Mine' dated 18 January 2021. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

Appendix E

Site Inspection Photographs

Appendix E Site Inspection Photographs

Audit Photograph Log

Ref	Description	Photo
P001	Waste segregation area in the 'YP' yard	
P002	Chemicals stored in the 'YP' yard	
P003	Dust suppression spray along mine portal access road	

Ref	Description	Photo
P004	Portal wash down area	
P005	Portal wash down area	
P006	Portal wash down	

Ref	Description	Photo
P007	Covered conveyor transporting coal to the ROM Coal Stockpile	
P008	Portal dam	
P009	Water intake at the portal dam	

Ref	Description	Photo
P010	Chemical storage bund at the workshop	
P011	Recent planting at gas well site	
P012	Recent planting near Bettys Creek	

Ref	Description	Photo
P015	Surface water dam at Vent Shaft 3	
P016	Gas well infrastructure near Mount Owen Complex	
P017	Rehabilitated pipeline crossings at Bettys Creek	

Ref	Description	Photo
P018	Water pipeline near crossing at Bettys Creek	
P019	Compensatory tree planting	
P020	Subsidence impact zone signage: “Mining Area Potential Ground Subsidence”	

Ref	Description	Photo
P021	Sewage treatment plant	
P022	Sewage treatment plant effluent irrigation area	
P023	Sewage treatment plant effluent irrigation area signage: “Effluent Reuse Area Keep Out”	

Appendix F

Response to 2017 IEA Recommendations

Appendix F Response to 2017 IEA Recommendations

Response to 2017 IEA Recommendations

Reference	2017 IEA Recommendation	2020 IEA Finding
SCH3 C16A	Confirm if methodologies comply with approved methods for sampling of Air Pollutants in NSW guideline in relation to the Meteorological station and associated monitoring.	The auditors sighted the Sentinex weather station calibration report, dated 07 May 2020, for 12 month maintenance and calibration of the met station. The weather station is operated and maintained in accordance with the following, as referenced in the calibration and maintenance annual report: - AS 3580.14-2011: Methods for sampling and analysis of ambient air - Meteorological monitoring for ambient air quality monitoring applications - DR_AS_3580.14.doc: DRAFT Methods for sampling and analysis of ambient air Part 14: Meteorological monitoring for ambient air quality monitoring applications - Procedure N002 - Maintenance and calibration of meteorological equipment - Manufacturer's Handbook(s)
SCH3 C16b	Confirm if methodologies comply with NSW industry noise policy or as otherwise approved by the EPA in relation to real-time measurement of temperature.	A review of the annual maintenance and calibration report indicates that temperature lapse rate is being monitored at a height of 2m and 10. The weather station calculates Sigma Theta and the subsequent atmospheric stability classes (stab cat). Sigma Theta and the stab cat were calculated in accordance with the NSW Industrial Noise Policy. This is in line with the new Noise Policy for Industry.
SCH3 C30	Undertake a technical assessment of Southern Sediment Dam (at fan site) to confirm it has been designed and installed generally in accordance with the series Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries.	An as-built survey has been carried out and this was used to determine that the as-built size of the dam is 2400m ³ , which is larger than design sizing of 1702 m ³ .
SCH3 C30	Undertake a technical assessment of Portal Sump (and other relevant mine water storage components) be undertaken to confirm it has been designed, installed and maintained in order to store a 100 year ARI 72 hour storm event and the Portal Sump (and other relevant mine water storage components) are in compliance with the permeability standard of <1 x10 ⁻⁹ m/s).	The WMP (2019) notes that the Portal Sump is operated such that the Maximum Operating Range (MOR) of approximately 44-47m RL and that the MOR has been determined to provide sufficient buffer storage to prevent water ingress to the underground workings via the portal in the 1:100 72 hr storm event and/or 1:100 AEP critical wet

Reference	2017 IEA Recommendation	2020 IEA Finding
		period. Visual inspection confirmed that there is no risk of uncontrolled discharge to the external surface water environment if the capacity of the in-pit sump is exceeded. The Portal Sump would have been formed at the early phases of mining to facilitate the UG Portal construction and commencement of underground mine development. Reference to the permeability standard applies to design and installation of 'future mine water storages' (WMP, p9, 2019). This standard is therefore not considered applicable to the Portal Sump.
SCH3 C32D SCH5 C9	Notify NSW OEH of the disturbance to two (2) AHIMS and the results of the investigation into the disturbance of AHIMS sites. Revise the AHMP to include the requirement to notify the OEH with respect to incidents relating to Aboriginal Heritage at the site. DPE was notified by HVCC/Glencore of the disturbance and results of investigation.	Integra UG notified OEH on 16 February 2018 to close out this recommendation. Integra UG requested the AHIMS status of sites 37-3-0701 and 37-3-0697 be updated accordingly. No response was received by OEH at the time of the audit. Refer IEA OFI 15
SCH5 C14a	Provide previous EAs for the project as listed in Appendix 2 of PA 08_0101 on the projects web site.	Links to previous EAs are available on the Integra UG Public Website.
Appendix 5, C5	Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the Glendell weather station. Amend future Environmental Noise Monitoring Reports to address this requirement.	Review of noise monitoring reports prepared by an external acoustics consultant verified that attended noise monitoring determines meteorological conditions in accordance with the requirements of Appendix 5 Condition 5 of Project Approval 08_0101.
SCH2 C14b	HVCC to review activities associated with the oil water separator at the portal service area with the aim of ensuring that the oil water separator returns to normal operations.	Integra UG stated that the oil-water separator has returned to normal operations. This improvement opportunity was identified during the site inspection component of the audit and investigated with relevant site personnel at the time. This recommendation was considered closed by Integra UG as of February 2018. Document was provided during the audit as evidence of preventative inspection and maintenance being carried out including: checklists documenting monthly surface environmental inspections by

Reference	2017 IEA Recommendation	2020 IEA Finding
		Environment team (visual inspection noting separator is working effectively and bund / sump is clear, and mechanical inspection / preventative work order (Maintenance Order 101624157, dated 30.01.2019).
SC3 C2	The Statement of Compliance within Environmental Noise Monitoring Reports could be improved by identifying the applicable CoAs that relate to noise criteria and providing a comment against each as to whether compliance was determined based on the noise monitoring results and operator observations during attended monitoring.	Integra UG commented that Table A3.1 Summary of Attended Noise Monitoring in each Environmental Noise Monitoring Report includes the applicable criteria and states whether compliance was determined at each monitoring location based on the noise monitoring results and operator observations during attended monitoring. This recommendation was closed in 2018.
SC3 C8a	Undertake annual sound power level testing of plant/equipment in accordance with approved Noise Management Plan.	Annual sound power testing of static sources was conducted by Umwelt during the audit period in accordance with the NMP.
SoC (GHG)	Include details of methane (i.e. tonnages) provided to Glennies Creek Power Station as part of Annual Returns. This information was provided for the 2014 and 2015 Annual Returns.	The methane emitted from Integra UG is discharged via goaf gas drainage boreholes to either EDL's Power Station or the flare site on Forest Road, and through mine ventilation. Integra UG record the methane sent to the EDL Power Station on a monthly basis with the annual total reported (in t CO ₂ -e) in Table 38 of the Annual Review.
SoC (Socio Economic)	Identify parameters/metrics that can be monitored through the project life cycle to measure positive and negative social impacts e.g. employment statistics with breakdown, local/regional \$ spend, training \$ spend on workforce, apprenticeship support, pre-mine closure workforce support redundancies, layoffs etc. This type of data may already be collected by other departments within IUM.	Integra UG maintain a Stakeholder Engagement Strategy. The 2017 IEA made an opportunity for improvement for Integra UG to consider identifying a suite of parameters/metrics that can be monitored through the projects life cycle to enable monitoring of both positive and negative social impacts. Integra UG measure the following parameters as part of Glencore's corporate monitoring: - Financial contributions to training and employment - Financial spend to local and regional areas - Direct financial contributions to the community organisations. Glencore did not consider additional actions were required.

Reference	2017 IEA Recommendation	2020 IEA Finding
The Department consultation	The Department requested the audit determine if monitored impacts on alluvial groundwater aquifers are consistent with the predicted impacts in the EA. It is recommended that a technical assessment be undertaken of groundwater at GCP11 and GCP9 to assess historical and current groundwater levels against rainfall data and mining data (i.e. relevant longwall start and completion dates) so as to better understand the context and potential causes of groundwater level declines noted at these two locations.	Refer section 7.2 of the IEA Specialist Report provided in Appendix D of the main 2020 IEA report. No evidence was obtained which indicates anything other than negligible impacts to the Glennies Creek alluvial aquifer.
The Department consultation	The Department requested the audit determine if subsidence impacts resulting from various geotechnical conditions and reduced longwall panel lengths have resulted in changed hydrological connectivity between groundwater aquifers and the mine. The GW Specialist recommended that a technical assessment monitored mine water associated with UG operations compared to groundwater / piezometric levels (alluvium and coal measures) and rainfall be undertaken in the first instance. This would assist in determining if the following two IEA Groundwater expert recommendations need to be implemented: - Water chemistry and / or isotopes monitoring associated with mine water, and which can be assessed and compared to water chemistry from overlying aquifers. Long-term data from additional piezometers and vibrating wire piezometers. Only one vibrating wire array is operational (DDH224). The network would ideally have been needed to be established prior to mining in proximity to the network, to capture baseline data as well as any change as a result of mining.	A review of biodiversity and water management on site has been conducted by the biodiversity and surface and groundwater specialists. The findings from these specialists in conjunction with the subsidence monitoring results indicate that Integra UG has not caused changes in the hydrological connectivity between groundwater aquifers and the mine. lengths have resulted in changed hydrological connectivity between groundwater aquifers and the mine. A technical assessment of the monitored mine water make associated with underground operations, compared to groundwater levels and rainfall was completed in 2018 and closed out this recommendation.
The Department consultation	The Department requested the audit determine if monitored impacts on GDEs are consistent with the predictions in the EA. The Biodiversity Management Plan currently only monitors the IEM project's potential impacts on terrestrial vegetation types not representative of any GDEs despite Section 1.2 (Purpose and Objective) of the Biodiversity Management Plan stating "provide a series of mitigation measures to minimise impact to threatened species, including groundwater dependent	The 2017 audit biodiversity expert stated that the project impacts on GDEs are currently in accordance with those assessed within the EAs. Integra UG revised the monitoring program within the biodiversity management plan in relation to GDE vegetation types along Bettys, Main ad and/or Glennies Creeks in 2018. Reporting of biodiversity monitoring results is conducted in accordance with SCH5,C11 and was reported in the 2018 and 2019 Annual Reviews.

Reference	2017 IEA Recommendation	2020 IEA Finding
	ecosystems (GDEs)". The biodiversity management plan monitoring could therefore be improved by the incorporation of additional monitoring sites within the GDE vegetation types along Bettys, Main and/or Glennies Creeks. It is recommended future annual reporting (i.e. annual reviews) includes specific GDE assessment regarding the monitoring results relevance to impact on GDEs.	The Biodiversity Management Plan was updated as detailed by Integra UG to specifically reference GDEs present within the mining area. Monitoring of GDEs is conducted in accordance with the Bettys Creek Diversion Asset Management Plan and the Water Management Plan. Integra UG provide a summary of monitoring results in the Annual Reviews.
SA NSW Consultation	SA NSW advised that as f 1 Jan 2017, the <i>Coal Mine Subsidence Compensation Act 2017</i> will be enacted. HVCC (Glencore) to undertake a review of this pending legislative change and determine its likely effect on the operations.	Verbal communication with Integra UG indicated that a detailed review was conducted by Glencore Corporate in 2017, which included Integra UG mine. Glencore Corporate have a detailed process in place to manage changes to legislation and as such this recommendation has been adequately closed out.

Appendix G

Opening and Closing Meeting Records

Appendix G Opening and Closing Meeting Records

Meeting Attendance Record

Project: Integra UG Independent Environmental Audit 2020

Meeting Purpose: Opening Meeting

Date: 01 December 2020

Location: Integra UG

Time: 0900

[illegible]

Meeting Attendance Record

Project: Integra UG Independent Environmental Audit 2020

Meeting Purpose: Closing Meeting Date: 03-Dec-20

Location: Integra UG⁰ Time: 1500

[illegible]