

Appin Mine Independent Environmental Audit 2025 GM³ Response to Recommendations

Onward Consulting Pty Ltd (Onward) was engaged by Illawarra Coal Holdings Pty Ltd (ICHPL) (trading as Gear M Illawarra Met Coal Pty Ltd [GM³]) to conduct an independent environmental audit (IEA) of the Bulli Seam Operations Project (BSO), an underground coal mining operation in the Wollondilly region of NSW, approximately 70 km south of Sydney.

The IEA was undertaken in accordance with the requirements of:

- AS/NZS ISO 19011:2019 Guidelines for quality and / or environmental management systems auditing
- Schedule 6, Condition 9 of MP08_0150
- the Independent Audit Post Approval Requirements (DPIE, 2020)

The audit period to which this audit applies is inclusive of the period from 12 November 2022 to 15 October 2025.

The IEA assessed a total of 15 non-compliances as follows:

- MP08_0150
 - *NC01* (Schedule 2, Condition 2)
 - *NC02* (Schedule 2, Condition 12)
 - *NC03* (Schedule 3, Condition 5) – CA01 identified
 - *NC04* (Schedule 3, Condition 9) – CA02 identified
 - *NC05* (Schedule 4, Condition 15)
- EPL 2504
 - *NC06* (Condition L1.1)
 - *NC07* Condition L2.4)
 - *NC08* Condition O1.1)
 - *NC09* (Condition O2.1)
 - *NC10* (Condition M2.1)
 - *NC11* (Condition M2.3)

- Mining Leases
 - *NC12* (related to CL 388 and MPL 201)
 - *NC13* (related to ML 1698)
- Standard Conditions, (Schedule 8A, Part 2) of the *Mining Regulation 2016*
 - *NC14* (Condition 10[2]) – CA03 identified
 - *NC15* (Condition 16[3])

Where a corrective action for a non-compliance or an opportunity for improvement has been identified, the GM³ response is provided.

MP08_0150 non-compliances

Finding ID	Condition	Requirement	Finding	Risk rating	CA or OFI	Corrective Action/OFI	GM ³ Response to Recommendation
NC01	Schedule 2 Condition 2	The Proponent must carry out the project: (a) generally in accordance with the EA, Statement of Commitments and PPR; (b) in accordance with the conditions of this approval; and (c) in accordance with any written directions of the Planning Secretary.	Conduct of the audit, including review of documentation, site interviews and site inspection indicate that ICHPL is non-compliant with this condition with the following conditions of approval being identified as non-compliant: Schedule 2, Condition 12 (Low) Schedule 3, Condition 5 (ANC) Schedule 3, Condition 9 (ANC) Schedule 4, Condition 15 (Low)	Low	N/A	N/A	N/A
NC02	Schedule 2 Condition 12	The Proponent shall ensure that all plant and equipment used at the site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	ICHPL reported a non-compliance in relation to this condition after the NSW EPA identified that the pump equipment at the AMVA Project was not operating in a proper and efficient manner during their site visit. It was found that the Principal Contractor did not adequately supervise the discharge resulting in a turbid water discharge exceedance on 19 April 2023. As clean-up activities commenced within a reasonable timeframe and response actions were proportionate to the non-compliance, no CA is proposed. Another self-reported non-compliance in relation to this condition was identified on 18 December 2023, with the logbook requirements of works approval 10WA117285 – Mountbatten not being maintained accordingly. As the response included reviewing all water meters to ensure any additional requirements needed to maintain logbooks were met, no CA or OFI has been identified.	Low	N/A	N/A	N/A
NC03	Schedule 3 Condition 5	The Proponent shall prepare and implement an Extraction Plan for first and second workings within each longwall mining domain to the satisfaction of the Planning Secretary... ...(n) include a regional seismic event monitoring program, which has been prepared in consultation with DRE, and which includes analysis of	The Subsidence Monitoring Program has a groundwater Trigger Action Response Plan (TARP) including triggers for 'increase in water inflow from the goaf'. The 20-day average reached Trigger Level 3 during LW710A extraction, which requires notification to the former Biodiversity Conservation Division (BCD) (now NSW DCCEEW CPHR), former DPE (now the DPHI), NSW RR. However, these notifications did not take place. The technical conclusions and actions provided by ICHPL on the Trigger Level 3 for the groundwater mine inflow TARP are endorsed by the auditor, and do not appear to have an environmental impact.	ANC	CA01	The following actions related to the groundwater TARP and mine inflow calculations, should be implemented: - improve "the Appin mine water balance process to involve underground mine personnel who are familiar with pumps and changes to underground equipment" - to improve the groundwater TARP in the next extraction plan "to better reflect groundwater	Accountability for internal governance of the Appin Mine underground water balance has been confirmed, including updated internal monitoring requirements and scheduled reviews Status: Closed

Finding ID	Condition	Requirement	Finding	Risk rating	CA or OFI	Corrective Action/OFI	GM ³ Response to Recommendation
		outcomes and proposed triggers for review of potential correlations with mining operations;...	Therefore, the administrative non-compliance from not adhering to notification requirements of Trigger Level 3 for the groundwater mine inflow TARP is classed as administrative in nature and CA01 identified.			impacts and appropriate corrective actions".	The groundwater TARP has been updated for the Longwalls 712 – 716 Extraction Plan. Status: Closed
NC04	Schedule 3 Condition 9	The Proponent shall prepare and implement a program to improve its prediction and understanding of subsidence impacts (in particular sub-surface impacts and impacts on groundwater resources)...	ICHPL committed to complete a review of the Environmental and Subsidence Research Program on 6 May 2024. Furthermore, section 5 of the Environmental and Subsidence Research Program states the document would be reviewed in accordance with Schedule 6, Condition 5. Information provided by ICHPL has not been able to demonstrate that a review has occurred during the audit period. This has led to the identification of an administrative non-compliance and corresponding CA02 .	ANC	CA02	Conduct BSO Environmental and Subsidence Research Program document review as committed in the current document and update management plan tracker to include monitoring programs.	The BSO Environmental and Subsidence Research Program has been reviewed post the completion of the audit. Status: Closed
NC05	Schedule 4 Condition 15	The Proponent shall ensure that all surface water discharges from the site (including from the Brennans Creek Dam) comply with the discharge limits (both volume and quality) set for the project in any EPL.	There were four non-compliances in relation to surface water discharge and nine exceedances of discharge criteria during the audit period, as discussed in Section 4.5.3. This has resulted in a low risk non-compliance. As the non-compliances were identified during the audit period, and the incident reporting procedure was correctly implemented by ICHPL, no CA or OFI have been deemed necessary.	Low	N/A	N/A	N/A

EPL 2504 non-compliances

Finding ID	Condition	Requirement	Finding	Risk rating	CA or OFI	Corrective Action/OFI	GM ³ Response to recommendation
NC06	L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the <i>Protection of the Environment Operations Act 1997</i> (POEO Act).	Documents reviewed as part of this audit indicate a number of non-compliances with relation to water pollution events resulting in a non-compliance with section 120 of the POEO Act. As all instances were suitably investigated and reported on, no CA or OFI has been deemed necessary.	Low	N/A	N/A	N/A

Finding ID	Condition	Requirement	Finding	Risk rating	CA or OFI	Corrective Action/OFI	GM ³ Response to recommendation
NC07	L2.4	Water and/or Land Concentration Limits	As discussed in Section 4.5.3, there were exceedances of limits for total suspended solids (TSS), Biochemical Oxygen Demand (BOD), zinc, Total Nitrogen, and pH. Relevant government agencies were notified of the above exceedances as per the requirements specified in EPL 2504 and MP08_0150. Given ICHPL followed the incident reporting procedure requirements, and follow-up actions were taken to prevent recurrence, this condition has been assessed as a low risk non-compliance, with no CA or OFI deemed necessary.	Low	N/A	N/A	N/A
NC08	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.	ICHPL reported a non-compliance in relation to this condition after the NSW EPA identified that the pump equipment at the AMVA Project was not operating in a proper and efficient manner during their site visit. It was found that the Principal Contractor did not adequately supervise the discharge resulting in a turbid water discharge exceedance on 19 April 2023. As clean-up activities commenced within a reasonable timeframe and response actions were proportionate to the non-compliance, no CA is proposed.	Low	N/A	N/A	N/A
NC09	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.	ICHPL made a self-reported non-compliance with respect to this condition as reported under O1.1. As the proceeding corrective actions undertaken by ICHPL were proportionate, no additional CA has been identified.	Low	N/A	N/A	N/A
NC10	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.	During the audit period monitoring was generally completed at the required frequency, using the method and units of measure specified, with the exception one instance on 21 May 2024 in which a water sample collected at LDP23 was not analysed for BOD, resulting in an administrative non-compliance. The NSW EPA was notified of this error by ICHPL.	ANC	N/A	N/A	N/A

Finding ID	Condition	Requirement	Finding	Risk rating	CA or OFI	Corrective Action/OFI	GM ³ Response to recommendation
		The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	Given the non-compliance has already been identified during the audit period, and that the incident reporting procedure was correctly followed, no CA or OFI deemed necessary.				
NC11	M2.3	Water and/ or Land Monitoring Requirements	Refer to discussion Condition M2.1	ANC	N/A	N/A	N/A

Mining leases non-compliances

Finding ID	Condition	Requirement	Finding	Risk rating	CA or OFI	Corrective Action/OFI	GM ³ Response to recommendation
CL 388 and MPL 201							
NC12	N/A	Payment of levies in accordance with Section 292C(3) of the <i>Mining Act 1992</i> .	It was identified in March 2025 that the Annual Rent and Levy Notices for CL 388 and MPL 201 were not paid within the allocated timeframe due to an administrative error. As the payments were subsequently expedited following identification of the error no CA or OFI has been identified.	ANC	N/A	N/A	N/A
ML 1698							
NC13	N/A	Conduct of activities not listed in lease issued under <i>Mining Act 1992</i> .	It was identified on 30 September 2024 that gas was extracted from ML 1698 between February and May 2024 when petroleum was not listed as a Mineral of interest. While there was no restriction within ML 1698 to prevent coal mining, and in particular the development of Razorback roadways, gas extraction and utilisation was not an approved activity within ML 1698. Petroleum has since been added to the mining lease and no further CA or OFI is deemed necessary.	ANC	N/A	N/A	N/A

Standard Conditions (Schedule 8A, Part 2) of the Mining Regulation 2016 Standard Conditions (Schedule 8A, Part 2) of the Mining Regulation 2016 non-compliances

Finding ID	Condition	Requirement	Finding	Risk rating	CA or OFI	Corrective Action/OFI	GM ³ Response to recommendation
NC14	10(2)	If a rehabilitation outcome document has not been approved by the Secretary, the holder of the mining lease must include a proposed version of the document.	The proposed Completion Criteria Statement is with the NSW RR for approval, following the refusal of the March 2025 statement (ref: RCC0001063). This document is not currently appended to the RMP, constituting an administrative non-compliance, and the identification of CA03.	ANC	CA03	Include the proposed Completion Criteria Statement as an Appendix to the RMP, and update with the approved version as it becomes available.	Proposed Completion Criteria have been included in the RMP and the revised document has been uploaded to the website. Status: Closed

Finding ID	Condition	Requirement	Finding	Risk rating	CA or OFI	Corrective Action/OFI	GM ³ Response to recommendation
NC15	16(3)	If a document is published on the website of the holder of the mining lease, the holder must ensure that it is published— a) for a rehabilitation management plan—within 14 days after it is prepared or amended, or b) for a forward program or an annual rehabilitation report—within 14 days after it is given to the Secretary or amended.	On 2 December 2022 it was identified that the Forward Program was not uploaded on the Project website within the required timeframe resulting in an administrative non-compliance. As the document has since been published on the website and no repeat incident of this nature have occurred since, no CA or OFI has been identified. Currently approved documents are available on the website and email correspondence confirms their upload within the required timeframes.	ANC	N/A	N/A	N/A

Opportunities for Improvement

Consent / license / lease	Condition	OFI ID	OFI requirement	GM ³ Response to Opportunity for Improvement
MP08_0150	Schedule 3, Condition 1	OFI01	In the EoP reporting, include a description of why the slides/falls/erosion are not considered to be due to mining and a plan showing the locations of the falls and slides relative to the mine plan and angle of draw to assist in the auditor's review of these conclusions.	A description of why the slides/falls/erosion are not considered to be due to mining and a plan showing the locations of the falls and slides relative to the mine plan and subsidence contours has been added to the scope of future EoP Reports. Status: Closed
MP08_0150	Schedule 3 Condition 3	OFI02	Consider including a statement in Annual Reviews clarifying that there has been no reported land or built feature impact from the recorded seismic events, which would assist in confirming the environmental performance of the seismic event monitoring.	GM ³ sought advice from the Seismology Research Centre and they have advised that they are able to include a statement in the annual report around the maximum reported or estimated intensity on the Modified Mercalli Intensity (MMI) scale from the seismicity that is recorded from the network. The MMI scale reports the felt (at lower levels) or observed effects on structures (at higher levels) from earthquakes, correlates to magnitude/distance combinations and is based on historically observed outcomes from earthquakes. This information will be provided in future Annual Reviews. Status: Closed
MP08_0150	Schedule 3 Condition 5	OFI03	Review subsidence predictions to consider higher levels of subsidence outside of panels at increasing depths.	MSEC will continue to use up to date survey data in subsidence models. Status: Closed

Consent / license / lease	Condition	OFI ID	OFI requirement	GM ³ Response to Opportunity for Improvement
MP08_0150	Schedule 3 Condition 5	OFI04	Ensure the BFMP, PSMP, LMP, and HMP within the Extraction Plan for LW712 include incident notification requirements consistent with the requirements of Schedule 6, Condition 7 of MP08_0150.	The draft management plans to be submitted for the Longwalls 712 to 716 Extraction Plan have been updated to include the revised incident notification requirements. Status: Closed
MP08_0150	Schedule 4, Condition 13	OFI05	To assist with prediction of dust dispersion patterns, assessing for potential hazards like dust plumes, and optimising ventilation systems, sigma-theta (the standard deviation of horizontal wind directions) should be included in the logged data records, to allow to the determination of atmospheric stability (if required).	Data is already collected from the weather stations that would enable sigma-theta to be calculated. Dust emissions from the site are infrequent and it is not considered that the calculation of sigma-theta on a continuous basis is warranted. Status: Closed
MP08_0150	Schedule 4, Condition 24	OFI06	Update the HMP to include a figure which shows non-Aboriginal heritage items.	A non-Aboriginal heritage items plan has been developed and incorporated into the Heritage Management Plan (Version 2.1). Status: Closed