

WCPL Responses to Recommendations made in the 2017 Independent Environmental Audit – Version 2

Wambo Coal Pty Ltd (WCPL) completed an Independent Environmental Audit (IEA) in September 2017, in accordance with Schedule 6, Condition 7 of Development Consent DA 305-7-2003 (the Development Consent). The 2017 IEA covered the period 1 November 2014 to 31 August 2017. In addition to the Development Consent, the audit also assessed compliance with DA 177-8-2004 (the rail consent), Environment Protection Licence 529 and Mining Lease 1572.

A copy of the audit report was submitted to DP&E in December 2017, together with a response to any recommendations contained in the audit report (Section 7). On 3 July 2018, DP&E advised WCPL the Audit report did not satisfactorily address DP&E's scoping letter to WCPL, dated 27 July 2017. The audit was revised to address DP&E comments. The tables below outline WCPL's responses to the recommendations contained in the IEA Report. Changes and additions to the previous version are highlighted yellow.

Table 1: WCPL Responses to Non- Compliance Recommendations

Ref	Audit Finding / Risk	Description	WCPL Response	Timing
Previous Audit N	on-compliances			
5.8, 5.18, 5.24	-	Review actions recommended by previous audit which have not been completed. Update management plans as required to address recommendations that are relevant to contemporary operations (Error! Reference source not found. , Refs 4.5 – 4.9).	Noted. The design for the return of intercepted groundwater remains in draft. This condition has been included in the 2019 revision of the North Wambo Creek Diversion Plan.	Submitted for consultation 24 April 2019
		 North Wambo Creek Diversion Plan not yet revised to include the required section on mechanism for the return of intercepted groundwater; 		
DA 305-7-2003 Non-Compliance Recommendations				
Schedule 3, Condition 7B	Administrative	Recommend that formal written requests to the Secretary are made in the future if consultation with regulators is not intended to be conducted in relation to management plans.	Noted.	-
Schedule 3, Condition 10		Inspection of steam flow monitoring equipment to ensure damaged equipment is repaired or replaced ASAP.	Frequency of download and inspection regime has been increased to quarterly.	Quarterly
Schedule 4, Condition 8 and Condition 9	Low	Recommend that documented coordination with nearby mines and an agreed protocol is developed to manage cumulative noise impacts to the satisfaction of the Secretary.	WCPL will continue to manage noise impacts and contact neighbouring mines and develop a protocol to manage cumulative noise impacts. A copy of the Protocol will be submitted to the Secretary upon completion.	30 November 2019.

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Ref	Audit Finding / Risk	Description	WCPL Response	Timing
Schedule 4, Condition 23A	Medium	This non-compliance relates to an unlicensed release of runoff from a sump located adjacent to Wollombi Creek at Hales Crossing. Consideration should be given to the current Hales Crossing sump and pump arrangement to remove the risk of sump inundation. Options include relocating the sump and pump apparatus to a location outside the flood extents of Wollombi Brook.	Options to improve the Hales Crossing sump and pump arrangement are being considered, including relocating the existing sump or placing the pump onto a raised platform.	30 November 2019
Schedule 4, Condition 25	Administrative	A comparison of the overall site water balance to the EIS predictions should be presented in future Annual Reviews. If the differences between the EIS water management system and operations are such that a meaningful comparison of the predictions is not possible, or the EIS does not provide sufficient detail on the water balance predictions to allow a comparison of the water balance (which looks likely based upon Appendix E of the EIS), this should be acknowledged.	Complete - EIS predictions added to the site water balance (Section 6.7) of the 2018 Annual Review.	Complete
Schedule 4, Condition 25	Administrative	The Annual Reviews do not explicitly forecast compliance with the HRSTS rules. It is recommended that the forecast presented in future Annual Reviews is expanded to explicitly address forecast compliance.	Complete - Forecast compliance with HRSTS rules included in Section 6.3 of the 2018 Annual Review.	Complete
Schedule 4, Condition 30 and 30A	Administrative	Site Water Management Plan should be updated to include the predicted salt balance.	A salt balance will be completed, and the results added to the next revision of the Site Water Balance Management Plan.	Site Water Balance (draft) has been revised to include. Remains in draft pending outcome of the JV
Schedule 6, Condition 12	Administrative	Letter (c) and (d) in Schedule 3 Condition 2 are located and made publicly available on website.	WCPL is unable to locate these documents.	-
DA 177-8-2004 N	DA 177-8-2004 Non-Compliance Recommendations			
Schedule 4, Condition 5		A summary of train movement times should be added to future Annual Reviews.	WCPL owns surrounding land, no issues have been raised and no complaints received.	Complete
Schedule 4, Condition 12		Written approval to be sought from the Director General to cease vibration monitoring.	Located correspondence from Department of Planning (dated 23 December 2008) with approval to discontinue monitoring.	Complete

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Ref	Audit Finding / Risk	Description	WCPL Response	Timing
Schedule 4, Condition 19	Administrative	Correspondence should be sought from RMS confirming that upgrades to the Golden Highway/Wallaby Scrub Road intersection are not required.	Mt Thorley Warkworth (MTW) has received DP&E approval to mine through Wallaby Scrub Road and Wallaby Scrub road has been officially closed.	Nothing further required

Table 2: WCPL Responses to Continual Improvement Recommendations

Ref	Description	WCPL Response	Timing		
DA 305-7-2003	DA 305-7-2003 Continual Improvement Recommendations				
Schedule 4, Condition 4	It is recommended that details of any exceedances are explained in the Annual Reviews. This includes referencing any local bushfires/RFS activity/extreme weather events that may have been the cause.	Agreed. WCPL has added a section to the Annual Review which discusses exceedances and calculates the WCPL contribution to $\rm PM_{10}$ dust.	Complete		
Schedule 4, Condition 11	ASAP investigate and remedy the likely calibration error for the overpressure microphone on the Thelander blast monitor, which developed in August 2017 after the last calibration check in July 2017.	Complete.	-		
Schedule 4, Condition 12	Monitoring results for the period 23/2/2017 to 29/3/2017 were reported incorrectly (overpressure and vibration levels were swapped in the results table). Recommend that monitoring data is checked monthly to ensure results are reported correctly.	WCPL has improved its data management with the implementation of the Equis database and repository of results.	Complete		
Schedule 4, Condition 15	A notification of entitlement to property inspection is sent to landowners within 2 km of the site that to ensure current owners are aware of this entitlement.	Agreed.	By 30 June 2019.		
Schedule 4, Condition 19	Seek written approval for blasting within 500 m of Crown and HVO land before blasting within 500 m of this land in the next audit period.	Notification procedure developed in consultation with relevant stakeholders. Procedure forms part of the Site Blast Management Plan. A copy of the procedure was provided to DP&E as required and is on the website.	Complete.		
Schedule 4, Condition 22	The Reject Emplacement Strategy (RES) should be submitted to DRG (not DP&E) and followed up to approval. It is noted that the plan is likely to require review following any positive determination of the United and Wambo Open Cut Coal Mine Project.	Noted			



Ref	Description	WCPL Response	Timing
Schedule 4, Condition 25	Improvements could be made in terms of the overall site water management if specific groundwater inflows to the open cut via alluvium and Permian could be pumped and/or metered.	Recommendations considered in 2018 Annual Review Groundwater Analysis by HydroSimulations. Changes such as the comparison of measured and predicted inflow volumes will be adopted in a future revision of the WCPL Groundwater Monitoring Program.	Next review of GWMP
Schedule 4, Condition 29	It is understood that a salt balance model has been developed for the site for the United/Wambo project. It is suggested that this salt balance be updated annually to include the seepage quality monitoring data.	A salt balance will be completed and provision will be made for the balance to be updated annually.	by 30 November 2019
	There is no recommendation in terms of frequency of monitoring. WCPL should determine the frequency of monitoring to apply for the salt balance model.	WCPL will determine the frequency of monitoring to apply for the salt balance model.	
Schedule 4, Condition 30	The GWMP should be updated with the suggestions provided by NSW government subsequent to approval of the GWMP in November 2015 and resubmitted. Updates should include:	Complete, changes made in V12 of the GWMP, approved by DP&E 17 September 2018.	Complete
	A more contemporary reference to groundwater sampling techniques;		
	• Amendment of the text relating to purging of groundwater bores to be consistent with the latest guidelines;		
	Outline the methods of water quality data upload from the laboratory;		
	• The bore labels in Figure 7 need to be clear for all bores; and		
	General update of text relating to historical or proposed activities.		
Schedule 4, Condition 34	Update GWMP to include Montrose Dam prior to its construction.	Current Mining Operation Plan refers to construction likely in 2023.	Prior to 2023 construction
Schedule 4, Condition 34		Addressed in 2018 Annual Review of Groundwater prepared by HydoSimulations for the WCPL Annual Review	Ongoing
	Consideration should be made to directly monitor the quality of groundwater seepage reporting to the underground and open-cut workings.	Samples will be taken at active underground areas, to complement the extensive groundwater monitoring network	
Schedule 4, Condition 40	Offset area E is required to be secured under a conservation agreement by December 2017 and included in the Biodiversity Management Plan and MOP. A draft has been sent to OEH. This should aim to finalise by the due date.	WCPL submitted the Conservation Agreement variation in March 2018. OEH returned the document 9 April 2019. It will now be finalised for signing.	31 December 2019.

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Ref	Description	WCPL Response	Timing
Schedule 4, Condition 47		Acacia anuera was identified to most likely be Acacia pendula in 2004. Further investigations were undertaken in 2006 and 2008 with no conclusive identification of the species. WCPL follows the precautionary approach and treats the species as Acacia pendula due to its listing in the TSC Act and EPBC Act.	2019 annual monitoring. (Appropriate flowering season as determined by the
	Recommend that identification of 'Acacia anuera' is finalised and amended in the development consent to Acacia pendula at next modification, if required.	Further investigations will be conducted during flowering season, to conclusively identify the species. The current consent condition references the <i>Acacia anuera</i> community identified in the 2003 EIS. WCPL will consider amending the development consent once further investigations re carried out.	WCPL Ecologist.)
		Sample collected by Ecologist during annual monitoring October 2018, unable to be positively identified as flowers or nuts were not present.	
Schedule 4, Condition 56	Seek to recover this contribution if regulators confirm that it has not been expended, or if it has seek the documented outcome of the Trust Fund.	Payment of \$50 000 was made to the Hunter Aboriginal Cultural Heritage Trust Fund 7 November 2005. WCPL will seek to recover this contribution.	31 December 2019.
Schedule 4, Condition 56D	Aerial on page 8 of the induction should be updated to be current.	A copy of the 2017 aerial will be provided for the induction.	Complete (31 March 2018)
Schedule 4, Condition 70	Site 3 and site 9 non-indigenous heritage items should be identified in the field. Then correspondence as required in the condition should occur to close out this item.	Site 3 is identified as abandoned Homestead A and Site 9 is abandoned Tractor. An assessment will be made as to the significance of these items and as to whether they are moveable. This information will be documented in the next review of the Cultural Heritage Management Plan, scheduled for 2018. Correspondence will be drafted to the Power House Museum to advise the	Correspondence has been drafted. Will be sent by 30 May 2019.
Schedule 4, Condition 71	Consistent with previous audit, recommend consultation occurs and correspondence received from RMS is sought confirming the new intersection is not required or they are satisfied for inclusion in next IEA.	outcome and close out this item. WCPL will follow up this recommendation prior to the next audit (2020)	
Schedule 4, Condition 82	Recommend the Montrose Tree Screen requires attention to ensure effectiveness in mitigating visual impacts	Included as MOP 2018-2020 commitment - Maintenance of the tree screen will continue	Spring 2019



Ref	Description	WCPL Response	Timing
Schedule 4, Condition 83		Condition 83 requires 'if a landowner of any dwelling assessed as having a high potential visual impact requests in writing to investigate ways to minimise the visual impact of the development on his/her dwelling'	N/A
	Provide a more recent notification to owners of private residences of right to visual mitigation under consent condition.	Table 4.4 in the EIS identifies Holt, Moses, Muller and Fenwick and subsequent text includes Skinner and Long as residences with high visual impacts.	
		Fenwick is the only property that remains privately owned. This property is subject to an access and compensation agreement.	
Schedule 4, Condition 84	The Annual Review for 2016 reports 6 lighting complaints for the period however only 5 are reported in the register. Recommend that all complaints are reported correctly in future.	Noted.	As required
Schedule 4, Condition 89	Recommend that DRE is consulted in the future to confirm satisfaction with spontaneous combustion management. This may occur through the Annual Review process, requesting a response to this query in the submission letter.	No issues of spontaneous combustion reported 2014, 2015 or 2016 Annual Reviews. Minor incident of spontaneous combustion reported in 2017 AR and mentioned to the Resource Regulator (Neil McIlhenny (NM)) during the annual inspection in September 2018. NM advised nothing further required.	Nothing further required at this time.
Schedule 4, Condition 94	Woodland corridors in the RL 160 dump areas are developed further to join the existing areas and the MOP is amended at next review to show proposed and defined corridors.	The establishment of woodland corridors is an important component of the biodiversity and offset strategy. WCPL will amend the MOP at the next review to show proposed and defined corridors.	During the next review of the MOP, following determination of the United JV.
Schedule 4, Condition 94A	Recommend soil surveys are undertaken the Soil Management Protocol is updated for any remaining areas to be stripped showing specific depths for specific areas.	Soil Management Protocol was updated in 2018, next revision will include any remaining areas to be stripped showing specific depths for specific areas.	Next review in 2019
Schedule 5, Condition 1	Notification to landowners of the publication of management documents and monitoring results on the website is updated at regular intervals (suggested 4-5 yearly).	Agreed. Included in 2018 Notification letter to landowners within 2kms. Letterbox drop 15/10/18	Complete
Schedule 5, Condition 1	Recommend neighbours are notified for all future exceedances of criteria.	Agreed.	As required
Schedule 6, Condition 2	Once the revised EMS is approved it must be sent to the relevant agencies, Council and CCC within 14 days.	EMS approved 26 March 2018 and sent to relevant agencies, Council and CCC within 14 days (sent 4 April 2018).	Complete
Schedule 6, Condition 6	Recommend that a register is kept to confirm reviews of strategies, plans, and programs required under this condition are undertaken following triggers specified in a-d.	The current register will continue to be updated as reviews to strategies, plans, and programs are made under this condition. Correspondence will continue to be sent each year following submission of the Annual Review to address this condition.	Complete



Description	WCPL Response	Timing
Continual Improvement Recommendations		
No evidence of reporting on measures to minimise loading outside specified hours to DP&E's approval. Recommended that a summary of train movement times is added to future Annual Reviews.	WCPL owns surrounding land, no issues have been raised and no complaints received.	Complete
Reviewed ARTC EPL 3142 and email from Matt Pearce of Aurizon dated 12/09/13. Email confirms that locomotives are required to be tested by the rail operator for compliance with noise equirements. Recommend that this is updated to remain contemporary.	WCPL tried unsuccessfully to have this correspondence updated with ARTC, prior to the audit in 2017. Another attempt will be made to satisfy this condition.	Prior to the next IEA in 2020.
t is recommended that section 2.2.6 of the Site Water Management Plan is improved by roviding a high level strategy for the decommissioning of water management structures including the management of water during the decommissioning process).	Complete. Section 2.2.6 of the SWMP was revised to address this recommendation (Version 12) which was approved by DP&E 7 September 2018.	Complete.
Recommend this condition is revised to remove at next modification.	This condition relates to minimising road safety impacts from train headlight glare on motorists. Audit confirms screening is in place and that no complaints or incidents occurred as a result of rail loop lighting. WCPL will investigate removing this condition during next modification (not in the Modification currently being assessed)	During the next DA 305-7-2003 Modification.
nternal inspections and photographs are taken of dirt tracking on the Golden Highway so that compliance with condition can be confirmed in future.	Noted. Compliant – Inspection and photographs completed by Merri Bartlett 17 October 2018, following period of rainfall. Road is sealed to the Golden Highway and no dirt tracking was noted.	Periodic inspections will continue
 A description of the existing as-built ESC arrangements for each sediment-affected catchment would enhance the current understanding of the site ESC arrangements; and A description of the known issues and actions would be useful in demonstrating that the ESCP is operating effectively and areas for improvement." (RE, 2018). Additionally, the ESCP structure and text would benefit from a review to improve the general eadability of the document. This could involve ensuring that the plan structure is logical, the cope and progression of each section is clear, and overly lengthy or repetitious text is 	ESCP was approved by DP&E in June 2018 and currently there is no plan to review this document. To be addressed in the next review, most likely following the determination of the United JV.	2019 (following determination of the United JV)
	Continual Improvement Recommendations o evidence of reporting on measures to minimise loading outside specified hours to DP&E's pproval. ecommended that a summary of train movement times is added to future Annual Reviews. eviewed ARTC EPL 3142 and email from Matt Pearce of Aurizon dated 12/09/13. Email onfirms that locomotives are required to be tested by the rail operator for compliance with noise quirements. ecommend that this is updated to remain contemporary. is recommended that section 2.2.6 of the Site Water Management Plan is improved by roviding a high level strategy for the decommissioning of water management structures ncluding the management of water during the decommissioning process). ecommend this condition is revised to remove at next modification. ternal inspections and photographs are taken of dirt tracking on the Golden Highway so that ompliance with condition can be confirmed in future. he following area recommendations for the ESCP: A description of the existing as-built ESC arrangements for each sediment-affected catchment would enhance the current understanding of the site ESC arrangements; and A description of the known issues and actions would be useful in demonstrating that the ESCP structure and text would benefit from a review to improve the general	Continual Improvement Recommendations o evidence of reporting on measures to minimise loading outside specified hours to DP&E's pproval. ecommended that a summary of train movement times is added to future Annual Reviews. WCPL owns surrounding land, no issues have been raised and no complaints received. WCPL tried unsuccessfully to have this correspondence updated with ARTC, prior to the audit in 2017. Another attempt will be made to satisfy this condition. WCPL tried unsuccessfully to have this correspondence updated with ARTC, prior to the audit in 2017. Another attempt will be made to satisfy this condition. Complete. Section 2.2.6 of the SWMP was revised to address this recommendation (Version 12) which was approved by DP&E 7 September 2018. This condition relates to minimising road safety impacts from train headlight glare on motorists. Audit confirms corrently being assessed). WCPL will investigate removing this condition during next modification (not in the Modification currently being assessed). WCPL will investigate removing this condition during next modification (not in the Modification currently being assessed). Noted. Compliant. Inspections and photographs are taken of dirt tracking on the Golden Highway so that ompliance with condition can be confirmed in future. A description of the keysing as-built ESC arrangements for each sediment-affected A description of the keysing as-built ESC arrangements for each sediment-affected A description of the keysing as-built ESC arrangements for each sediment-affected A description of the keysing as-built ESC arrangements for each sediment-affected A description of the keysing as-built ESC arrangements in dewelve the general adability of the document. A description of the known issues and actions would be useful in demonstrating that the ESCP is operating effectively and areas for improvement." (RE, 2018). A description of the known issues and actions would be useful in demonstrating that the ESCP structure and text would benefit from a revieve to



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Schedule 4, Condition 44	Install nest boxes	Fifty nest boxes were installed in 2018. WCPL Biodiversity MP has been revised to include locations and nest box type installed at each location.	Complete
Schedule 4, Condition 90	Dangerous Goods and Hazardous Substances Management Plan (last updated in May 2015) is reviewed	Compete - Current version WI-SAH-MNP-0049 V1, located on Peabody SAWOL system is dated November 2018	Complete
Schedule 4 Condition 95	The mine exit strategy should be developed with Council within 5 years of closure (within the next audit period) or written extension sought from DPE if new approval is granted for the Wambo United Project.	Current approvals will see underground mining continue at WCPL until December 2039.	Ongoing
Schedule 5, Condition 1	Confirmation from DP&E should be sought in future to confirm this condition is not required to be triggered.	The Air Quality Greenhouse Gas Management Plan (Version 7, currently with DP&E for approval) contains a Landowner Notification Procedure as Appendix D. Section 4.6.1 of the Noise Management Plan addresses Landowner Notification. WCPL will consider this requirement and seek confirmation from DP&E if deemed necessary.	30 June 2018.
Other		deemed necessary.	
NA	 AGE made the following recommendations for future groundwater modelling and assessments (see Appendix F): Future groundwater modelling updates/reports need a clear description of the interactions/connectivity of the open cut and underground area and how this is represented in the modelling; Future groundwater modelling updates/reports should comment on theinteraction/connectivity of the open cut and underground areas and whether it is visible inthe observational data; and Future annual groundwater monitoring reviews should comment on the interaction/connectivity of the open cut and underground area and on the degree of matchof the predicted versus observed water levels. The predictions, actual and 	Recommendations have been emailed to HydroSimulations. Groundwater model will be rerun for the Extraction Plan for Longwalls 21 and beyond (approximately 2020)	Approx 2020



Ref	Description	WCPL Response	Timing
	The status of the single groundwater licence under the <i>Water Management Act</i> 2000 should be regularly followed up with DPI-Water	Six WCPL groundwater licences have been consolidated – WAL39738, 39803, 41528, 39375, 41520, 41494. New WAL yet to issued by NSW Land Registry Services	Complete
N/A	 Recommendations for future management of the North Wambo Creek Diversion: The current diversion management and monitoring objectives are contained in several documents. It is recommended these are consolidated into a single management plan for the diversion. It is noted that Wambo is committed to the preparation and implementation of a new Diversion and Rehabilitation Plan; 	NWCD Plan has been revised. Sent to DP&E and other relevant parties for consultation 24 April 2019.	Complete
N/A	The diversion management program should be implemented to improve the operation of the diversion;	Agreed. The revised NWCD Plan contains a detailed rehabilitation plan including: Table 13: 5 Year NWCD Rehabilitation and Maintenance Plan	Rehabilitation and Maintenance activities to commence Q3
N/A	Ongoing management is required in order to ensure that soil erosion is minimised and ground cover is given adequate opportunity to become established; and	Appendix C – Detailed Rehabilitation Plan	2019.
N/A	 Rehabilitation of subsided areas of the diversion is required in accordance with an Extraction Plan (or Subsidence Management Plan), including repairing surface subsidence cracks and undertaking subsidence remediation where necessary in areas where the diversion has been subsided. 		
N/A	The area in RWEA B is rehabilitated to prevent further damage and reduce risks to the surrounding Central Hunter Grey Box-Ironbark Woodland EEC as per Ecological Australia's recommendations.	Most appropriate method of rehabilitation to be determined, in order to reduce impacts if rehabilitation is undertaken with machinery.	Q3 2019
N/A	Subsidence affected sites identified as 'intolerable' by SLR Consulting should be remediated to an acceptable standard as per SLR's recommendations. Photos of completion should be kept within the database along with a report checklist with date and signature demonstrating works were completed.	Most appropriate method of rehabilitation to be determined, in order to reduce impacts if rehabilitation is undertaken with machinery.	Q3 2019
N/A	Update the Weed Plan.	Agreed.	Q4 2019
N/A	Future Annual Reviews include figures of areas that have been treated for weeds during the annual review period with a focus on <i>Acacia saligna</i> .	Figures of areas treated completed for the 2017 and 2018 Annual Reviews, <i>Acacia saligna</i> will be targeted in 2019 weed management program.	2019 - Seasonal weed management
N/A	It is recommended that the road drain outside the coal stockpile perimeter collection drainage network be de-silted and monitored to confirm whether the flow direction of the drain is adequate.	WCPL has engaged consultants to review catchment drainage and assess the efficiency of drains and sediment dams in each catchment. Any sediment dams or road drains identified to be undersized or in need	2019
N/A	It is recommended that accumulated sediment is removed from the Gordon Below Franklin where necessary in order to reinstate the design/operating storage capacity.	of de-silting (including the Gordon Below Franklin Dam) will be actioned appropriately. Investigations are ongoing with regards to the South Wambo Project	