



Western Coal Services

Response to Independent Environmental Audit Recommendations

March 2022



Western Coal Services Response to the Independent Environmental Audit Recommendations December 2021

This document has been prepared to satisfy Schedule 5 Condition 10 of the Western Coal Services Project Approval (SSD 5579).

Table 1 shows the Western Coal Services response to the auditor's recommendations as listed within Table 9 of the 2021 Independent Environmental Audit (IEA) Report relating to Non-Compliance Recommendations.

Table 1: Non-Compliance Recommendations

Schedule and Condition Number	Condition	Compliance Status	Details	IEA- Recommendations	Western Coal Services Response/ Action Plan	Timeframe for Completion of Action
SSD-5579 and Statement of Commitments						
Schedule 2 Condition 9	Prior to the end of December 2015, or as otherwise agreed by the Secretary, the Applicant must surrender all existing development consents or approvals that it holds for the site in accordance with section 104A of the EP&A Act.	Admin Non-Compliance	The surrender of DA06-0017 was completed in Dec 2018 (during the audit period), exceeding the 2015 deadline. No evidence has been provided regarding an extension granted by the Secretary, therefore administrative non-compliance, however no further recommendations.	No further recommendations.	Finding and recommendation noted. No further action is proposed.	N/A
Schedule 3 Condition 8	The Applicant must: (a) implement best management practice to minimise the construction, operational and road noise of the development; (b) operate 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 coal transport and	Low Non-Compliance	(a) No construction during the audit period. Operational noise is managed through the Noise Management Plan and monitored. Road noise is monitored quarterly along the Wallerawang Haul Road and noise mitigation measures are outlined in the driver Code of Conduct. No noise exceedances or complaints during the audit period. (b) Site operates a noise management system that predicts temperature inversions. Noise is discussed in the morning meetings.	NC REC 1: Include cumulative noise management as a regular item on the agenda for the Energy Australia consultation meetings. IMP REC 2: To cover Condition 8(c), implement	R1 WCS IEA 2021: Centennial will liaise with Energy Australia regarding ongoing cumulative noise management. R2 WCS IEA 2021: Centennial will	R1: 15/8/2022 R2: 7/9/2022

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	<p>processing operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;</p> <p>(c) minimise the noise impacts of the development during meteorological conditions under which the noise limits in this consent do not apply (see Appendix 5);</p> <p>(d) co-ordinate noise management on site with the noise management of other approved developments and/or projects on or in the vicinity of the site to minimise cumulative noise impacts; and</p> <p>(e) carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.</p>		<p>Noise compass wind directions/temperature inversions used as a predictive tool for operations. Uses a traffic light system for risk level.</p> <p>(c) Site operates a manual system of checking daily weather forecasts to determine days when meteorological criteria may not apply (e.g. during wind speeds and temperature inversions). No evidence was provided to show that site are alerted in real time. Improvement recommendation has been made for use of real time alerts.</p> <p>(d) There are regular consultation meetings with Energy Australia (minutes provided), however no evidence was provided to verify that cumulative noise impacts are coordinated between the two sites. <u>Therefore low non-compliance.</u></p> <p>(e) Noise monitoring is carried out monthly at the site, and quarterly at the Wallerawang Haul Road. No exceedances of noise criteria during the audit period.</p>	a system where alerts are sent to site when meteorological conditions mean that noise limits in do not apply (e.g. high wind speeds, temperature inversions).	develop in consultation with relevant suppliers a metrological alert system which will notify the site when noise limits do not apply.	
Schedule 3 Condition 16	<p>The Applicant must:</p> <p>(a) implement best practice management to minimise the off-site odour, fume and dust emissions of the development;</p> <p>(b) implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site;</p> <p>(c) minimise the surface disturbance of the site;</p>	Low Non-Compliance	<p>(a) No instances of offsite odour, fume or dust emissions from the project. No complaints. No exceedances of criteria or non-compliance. Site inspection observed dust to be managed well. No odour/fume observed while on site.</p> <p>(b) Greenhouse gas emissions are limited to mobile plant, which are only operated as required. Emissions are reported though the NGERs program.</p>	NC REC 2: In consultation with an air quality specialist develop and implement a system of predictive air dispersion modelling as required under Condition 16(e).	R3 WCS IEA 2021: Centennial has discussed upgrades to the implemented air modelling system and has engaged a supplier to implement a predicative air dispersion modelling system.	R3: 7/9/2022

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	<p>(d) minimise any visible off-site air pollution generated by the development;</p> <p>(e) operate a comprehensive air quality management system that uses a combination of predictive meteorological forecasting, predictive air dispersion modelling and air quality monitoring data to guide the day-to-day planning of coal transportation and processing operations and implementation of both proactive and reactive air quality mitigation measures to ensure compliance with the relevant conditions of this consent; and</p> <p>(f) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note d to Tables 7-9 above), to the satisfaction of the Secretary.</p>		<p>(c) Surface disturbance is largely restricted to existing operations. No clearing of undisturbed areas during the audit period.</p> <p>(d) No visible offsite air pollution observed during the site inspection. No complaints relating to visual impact or air quality.</p> <p>(e) • Predictive meteorological forecasting is used to generate daily Dust Risk Reports, which are presented in the morning meetings (minutes provided). Water carts and stockpile sprays are implemented on high risk days. Stockpile sprays are automatic, through CITECT.</p> <ul style="list-style-type: none"> • No predictive air dispersion modelling. <u>Therefore low non compliance.</u> • Air quality monitoring data is collected at the site. TARP relates to PM10 triggers. No exceedances/non-compliances during the audit period. (f) Evidence was provided to show that during extraordinary events (e.g. 2019 bushfires) additional water carts were implemented to minimise air quality impacts of the development. 			
Schedule 3 Condition 23	The Applicant must comply with the performance measures in Table 10 to the satisfaction of the Secretary.	Low Non-Compliance	<p>The required performance measures were generally implemented during the audit period, however there was no evidence of Lamberts Gully Creek monitoring or channel stability monitoring. Therefore low non-compliance.</p> <p>It was noted that there have been a significant number of improvements to the</p>	NC REC 3: Complete the required channel stability monitoring for Lamberts Gully Creek and Wangcol Creek.	R4 WCS IEA 2021: Channel Stability monitoring has now been undertaken by a consultant. Centennial is currently awaiting the report. Annual monitoring will be	No further action is required.

Schedule and Condition Number	Condition	Compliance Status	Details	IEA- Recommendations	Western Coal Services Response/ Action Plan	Timeframe for Completion of Action
			water management system on site since the previous audit.		undertaken in accordance with the management plan.	
Schedule 3 Condition 24	<p>The Applicant must prepare and implement a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:</p> <p>(a) be prepared in consultation with the EPA, WaterNSW, DPIE – Water, LCC, Forestry Corporation of NSW and Energy Australia by suitably qualified and experienced person/s whose appointment has been approved by the Secretary;</p> <p>(b) be submitted to the Secretary for approval within 4 months of the date of this consent, unless otherwise agreed by the Secretary; and</p> <p>(c) include a:</p> <p>(i) Site Water Balance, that:</p> <ul style="list-style-type: none"> includes details of: <ul style="list-style-type: none"> sources and security of water supply, including contingency supply for future reporting periods; water use and management on site; any off-site water discharges; and reporting procedures, including the preparation of a site water balance for each calendar year; and investigates and implements all reasonable and feasible measures to 	Low Non-Compliance	Three versions of the Western Coal Services Water Management Plans (WMP) have been developed for the site. August 2014 version (unapproved), October 2017 version (unapproved - submitted for approval 18/10/17) and February 2019 (unapproved - submitted for approval 15/03/2019). This audit has only assessed the 2014 version. Preparation (2014 Version) -	IMP REC 3: Complete maintenance works for areas of erosion identified along conveyor route during site inspection (refer photo 1 in audit report).	R5 WCS IEA 2021: Centennial have engaged a contractor to undertake road maintenance along Overland Conveyor 2.	R5: 30/05/2022
			a) Consultation outlined in Section 1.4 of WMP.	IMP REC 4: Complete repair works along 50m of drainage line (refer Figure 5 in audit report).	R6 WCS IEA 2021: Centennial have engaged a contractor to undertake drainage repair.	R6: 30/05/2022
			b) WMP submitted in August 2014 (within required submission timeframe).	IMP REC 5: Clean out areas of rock drains near the boundary of EA and Centennial (refer Figure 7 in audit report)	R7 WCS IEA 2021: Centennial have engaged a contractor to undertake drain maintenance.	R7: 30/05/2022
			c) (i) Site Water Balance provided in Section 7, and annual updates provided for 2020 and 2021.	IMP REC 6: Undertake engineering review to identify solutions for area of weak point in the wall of A Pit (refer Photos 15, 16, and 17 in audit report).	R8 WCS IEA 2021: An engineering review has been undertaken by Centennial. The weak point identified through WCS IEA poses no risk to the structural integrity of A pit nor LG REA.	No further action is required.
			(ii) • Surface Water Management Plan included in the following section 6., baseline data in Section 9, triggers in Section 11, Monitoring and reporting included as Section 10 & 12.	IMP REC 7: Remove coal fines that are currently blocking water filtering	R9 WCS IEA 2021: Centennial engaged a contractor to	No further action is required.
			(iii) Baseline Groundwater Data Section 3, Groundwater Criteria Section 10.1, Groundwater monitoring Section 8, Validation Section 10 & 12.3, exceedances of criteria Section 11.			
			(iv) Protocol for managing cumulative impacts Section 12.4.			
			Implementation			

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	<p>minimise potable water use and to re-use and recycle water;"</p> <p>(ii) Surface Water Management Plan, that includes:</p> <ul style="list-style-type: none"> • detailed baseline data on water flows and quality in the watercourses that could potentially be affected by the development; • a detailed description of the SCSS water management system, including the: <ul style="list-style-type: none"> o clean water diversion systems; o erosion and sediment controls; and o mine-water management systems; • detailed plans, including design objectives and performance criteria for: <ul style="list-style-type: none"> o design and management for the emplacement of coal reject materials and potential acid-forming or sulphate-generating materials; o management of sodic and dispersible soils; o reinstatement of appropriate drainage lines on the rehabilitated areas of the site; and o control of any potential water pollution from the rehabilitated areas of the site; • performance criteria for the following, including trigger levels for investigating any associated potentially adverse impacts: 		<ul style="list-style-type: none"> • Non - compliance for implementation. No evidence of Lamberts Gully Creek monitoring or channel stability monitoring (refer NC REC 3 above). • Some other minor improvement recommendations have been made in relation to water management observed during the site inspection. • Annual water and salt balance provided for 2020 and 2021. • Vista Data Vision shows current water level in dams, flow rate, water quality specs, etc. • Water quality trigger levels are included in the 2014 and 2019 Water MPs. Site completes monitoring and implements TARPs as per the 2019 MP, noting that this goes above and beyond commitments made in the 2014 Water MP. TARP includes notification requirements to various agencies (Water NSW, DPIE, EPA, etc.) • Noted that a new WMP is currently being prepared. • Copies of PowerPoint presentations from Area 4 Rehabilitation (Feb & Oct 2020) and Hydrogeology Model provided. • Annual Reviews include surface and groundwater monitoring data and analysis. • Water MP notes that there are no GDEs in the vicinity. 	through coir logs near retention pond (refer Photo 24 in audit report).	complete the works described. The area was inspected on 15 February 2022 and confirmed the recommendation has been addressed.	
				IMP REC 8: Remove coal in dirty water drain adjacent to main haul road and clean water drain (refer Photo 25 in audit report).	R10 WCS IEA 2021: Centennial have engaged a contractor to undertake drain maintenance.	R10: 30/05/2022
				IMP REC 9: Desilt Stockpile Sediment Pond as it is at over 50% capacity (refer Photo 26 in audit report).	R11 WCS IEA 2021: Centennial have engaged a contractor to undertake the removal of material in the dam to re-establish capacity.	R11: 30/09/2022
				IMP REC 10: Consider the use of coir logs in area of failed sediment fence at Kerosene Vale site (refer photo 28 in audit report)	R12 WCS IEA 2021: Centennial is currently obtaining a quote from contractor to establish coir logs in the area identified. Works will be scheduled to be undertaken as required.	R12: 30/06/2022
				IMP REC 11: Remove coal from drain near LDP003 at Kerosene	R13 WCS IEA 2021: Centennial is currently obtaining a	R13: 30/7/2022

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	<ul style="list-style-type: none"> o SCSS water management system; o downstream surface water quality; and o stream and riparian vegetation health for the Wangcol and Lamberts Gully Creeks; • a program to monitor and report on: <ul style="list-style-type: none"> o effectiveness of the SCSS water management system; and o surface water flows and quality in the watercourses potentially affected by the development; and • reporting procedures for the results of the monitoring program; and • a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development;" <p>(iii) Groundwater Management Plan that includes:</p> <ul style="list-style-type: none"> • detailed baseline data of groundwater levels, yield and quality on the SCSS and surrounds that could be affected by the development, including any licensed privately-owned groundwater bores; • groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts; • a program to monitor and report on: <ul style="list-style-type: none"> o groundwater inflows to former open cut pits; 			<p>Vale (refer Photos 30 and 31 in audit report).</p> <p>IMP REC 12: Reinstall coir log at LDP003 (refer Photo 38 in audit report).</p> <p>IMP REC 13: Re-hydromulch area at Western Coal (refer Photo 40 in audit report).</p>	<p>quote from a contractor to complete maintenance of the drain at Kerosene Vale. Works will be scheduled to be undertaken as required.</p> <p>R14 WCS IEA 2021: Centennial is currently obtaining a quote from a contractor to reinstall the coir log at LDP003. Works will be scheduled to be undertaken as required.</p> <p>R15 WCS IEA 2021: Centennial has discussed the scope of works with various contracting companies and is currently awaiting quotations for the hydromulching. Works will be scheduled to be undertaken as required.</p>	<p></p> <p>R14: 30/06/2022</p> <p>R15: 30/7/2022</p>

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	<ul style="list-style-type: none"> o the seepage/leachate from water storages, emplacements of power station ash and/or coal rejects, and former open cut voids; o background changes in groundwater yield/quality against changes induced by the development; and o impacts of the development on: <ul style="list-style-type: none"> - regional and local (including alluvial) aquifers; - groundwater supply of any potentially affected private landowners; and -any potentially affected groundwater dependent ecosystems and riparian vegetation; • a program to validate the groundwater model for the development, including an independent review of the model every 3 years, and comparison of monitoring results with modelled predictions; and • a plan to respond to any exceedances of the performance criteria; and (iv) protocol that has been prepared in consultation with the owners of nearby power generation or mining developments to: <ul style="list-style-type: none"> • minimise cumulative water quality impacts; • review opportunities for water sharing/water transfers between these developments; • co-ordinate water quality monitoring programs as far as practicable; 					

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	<ul style="list-style-type: none"> undertake joint investigations/studies in relation to complaints/exceedances of trigger levels where cumulative impacts are considered likely; and co-ordinate modelling programs for validation, re-calibration and re-running of groundwater and surface water models." 					
Schedule 3 Condition 36	Within 3 months of the date of consent, until coal transportation ceases on each respective haul road, unless otherwise agreed by the Secretary, the Applicant must maintain the surface of the haul roads from Angus Place to Mount Piper and Wallerawang power stations with a smooth sealed surface, effectively free of potholes, indentations or other unevenness of the surface that would cause noise levels from traffic travelling on the road to exceed the sleep disturbance criteria in Table 3, to the satisfaction of the Secretary.	Low Non-Compliance	<ul style="list-style-type: none"> No inspections of haul roads are completed. Condition of haul roads unable to be assessed as part of this IEA. Previous evidence however outside of audit period. Site advised minimal use of the haul road (evidenced by trucking records 2018-2021). Haul road observed during the audit had no significant issues visible to the auditors 	NC REC 4: To cover the requirements of Condition 36-38, contact DPIE regarding the requirements to undertake an independent inspection and condition report of the surface of the haul roads from Angus Place to Mount Piper and Wallerawang power stations, by an independent road maintenance expert.	R16 WCS IEA 2022: Coal transportation is currently not being undertaken on the haul road. Centennial will consult with the Department regarding maintenance requirements under the current business plan for Western Operations.	R16: 30/08/2022
				NC REC 5: Maintain records of any repair of haul roads if required.	R17 WCS IEA 2022: Centennial will identify, and document repair works of haul roads in the future.	R17: Ongoing.
Schedule 3 Condition 37	Within 3 months of the date of consent, and every 6 months thereafter until coal transportation ceases on each respective haul road, unless otherwise agreed by the Secretary, the Applicant	Low Non-Compliance	No independent inspections of haul roads is completed, therefore low non-compliance, however no further recommendations (refer NC REC 4 and 5 above). Condition of haul roads unable to be assessed as part of this	No further recommendations	Finding and recommendation noted. No further action is proposed.	N/A

Schedule and Condition Number	Condition	Compliance Status	Details	IEA- Recommendations	Western Coal Services Response/ Action Plan	Timeframe for Completion of Action
	must arrange and pay the cost of independent inspections and condition reports of the surface of the haul roads from Angus Place to Mount Piper and Wallerawang power stations by an independent road maintenance expert, approved by the Secretary. Copies of the inspection and condition reports must be forwarded to the Secretary at the same time as they are provided to the Applicant.		IEA. Previous evidence however outside of audit period. Site advised minimal use of the haul road. Haul road observed during the audit had no significant issues visible to the auditors.			
Schedule 3 Condition 38	If any haul road condition report, referred to in condition 37, recommends repair or remedial works in order to prevent exceedances of the sleep disturbance criteria in Table 3, then the Applicant must not undertake trucking operations on the affected haul road at Night until the recommended repair and/or remedial works are undertaken to the satisfaction of the independent road maintenance expert.	Low Non-Compliance	No independent inspections of haul roads is completed, therefore low non-compliance, however no further recommendations (refer NC REC 4 and 5 above). Condition of haul roads unable to be assessed as part of this IEA. Previous evidence however outside of audit period. Site advised minimal use of the haul road. Haul road observed during the audit had no significant issues visible to the auditors.	No further recommendations	Finding and recommendation noted. No further action is proposed.	N/A
Schedule 5 Condition 10	Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.	Admin Non-Compliance	The 2018 IEA was dated 15 January 2019. MCW was commissioned in October 2018 and the IEA was submitted to DPIE on 27/02/2019. Therefore, administrative non-compliance, however no further recommendations.	No further recommendations	Finding and recommendation noted. No further action is proposed.	N/A
Statement of Commitments 3.1	Removal of the northern two thirds of the existing Co-Disposal REA at the Springvale Coal Services Site within five years of Project Approval.	Low Non-Compliance	Has not been completed during the audit period. Noted that this is in the MOP and is planned for completion. HRA has been completed for this work.	NC REC 6: Details of the co-disposal works referenced in Statement of Commitments 3.1 to be included in the RMP.	R18 WCS IEA 2022: Centennial will include details of the co-disposal works in the RMP	R18: 2/7/202222

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Statement of Commitments 5.3	Within 5 years of the date of the Project Approval, complete the separation of clean and dirty water at the Springvale Coal Services Site. The design will include the diversion of upstream catchments of Huon Gully around the new REA. The sub-catchment containing the existing A Pit REA (previously the Lambert Gully upstream of the Springvale Coal Services Site Open Cut) as well as the new REA will be diverted into the New Sediment Dam. This sub-catchment currently discharges to Huon Gully without treatment and the staged bypass and therefore the proposed change will lead to improved water quality in Huon Gully. Following remediation of the new REA, this sub-catchment of Huon Gully will be restored.	Low Non-Compliance	Required within 5 years of the consent (i.e. by 4/4/2019) however not yet completed, therefore low non-compliance. The majority of the clean and dirty water separation has been completed. Some works still in progress. However, noting that there is an EA modification being sought, which if approved, will include modifications to the water management systems. No further recommendations.	No further recommendations	Finding and recommendation noted. No further action is proposed.	N/A

Table 2 shows the Western Coal Services Response to the IEA Recommendations listed within Table 10 of the 2021 IEA Report relating to Additional Recommended Actions.

Table 2: Additional Recommended Actions

Aspect	Condition Reference	Improvement REC Number	IEA- Recommendation	Western Coal Services Response/ Action Plan	Timeframe for completion of action
Consultation	SSD-5579 Schedule 2 Condition 17	IMP REC 1	Centennial to consult with Energy Australia and Council as part of the RMP preparation.	R19 WCS IEA 2022: Centennial will incorporate Energy Australia and Council into the RMP Stakeholder Engagement Strategy .	R19: 2/7/2022
Ecology	SSD-5579 Schedule 3 Condition 27	IMP REC 14	Follow up with DPIE to get the 2017 RHCIP Approved.	R20 WCS IEA 2022: Centennial will re-submit the RHCIP for Approval in the DPIE portal.	R20: 30/6/2022
Waste/Carbonaceous Material	SSD-5579 Schedule 3 Condition 42	IMP REC 15	Remove areas of coal spill identified under conveyors during site inspection (refer photos 2, 3 and 6 in audit report).	R21 WCS IEA 2022: Centennial have engaged a contractor to undertake cleaning under over-land conveyors.	R21: 30/5/2022
		IMP REC 16	Remove area of coal spill identified at the base of hill below conveyor during site inspection (refer photo 10 in audit report).	R22 WCS IEA 2022: Centennial have engaged a contractor to undertake removal of coal at the base of the hill.	R22: 30/5/2022
Rehabilitation	SSD-5579 Schedule 3 Condition 44	IMP REC 17	Angus Place RMP to include removal of derelict buildings at Kerosene Vale (refer Photos 33, 35, 37 in audit report).	R23 WCS IEA 2022: Centennial will include the removal of derelict buildings into the RMP.	R23: 2/7/2022

Aspect	Condition Reference	Improvement REC Number	IEA- Recommendation	Western Coal Services Response/ Action Plan	Timeframe for completion of action
	SSD-5579 Schedule 3 Condition 45	IMP REC 18	In the next revision of the MOP/RMP add an extra column to Table 14 (see existing MOP) to show where each of the Regulatory requirements is met in the document.	R24 WCS IEA 2022: Centennial will include regulatory requirements in the RMP.	R24: 2/7/2022
Surface Water	EPL 21229 Condition L2.4	IMP REC 19	Investigate options to detect discharges at LDP002 i.e. level sensor for volume. Other option is quarterly water testing to get an understanding of water quality.	R25 WCS IEA 2022: Centennial have obtained a quote and is liaising with contractors to install a level sensor at LDP002.	R25: 31/10/2022
	EPL 21229 Condition O5.3	IMP REC 20	Stockpile Sediment Pond to be desilted to retain design capacity.	R11 WCS IEA 2021: Centennial have engaged a contractor to undertake the removal of material in the dam to re-establish capacity.	R11: 30/09/2022