Independent Environmental Audit (IEA) Western Coal Services



for Springvale Coal Pty Ltd

Springvale Coal Services, Castlereagh Highway, Blackmans Flat NSW 2790

MCW Environmental

April 2016

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Abbreviations

Abbreviation	Description
AEMR	Annual Environmental Management Report
AQMP	Air Quality Management Plan
Applicant	Centennial Coal Company
AR	Annual Review
Centennial	Centennial Coal Pty Ltd (parent company to Springvale Coal Pty Ltd)
CCC	Community Consultation Committee
CHPP	Coal Handling Preparation Plant
CEMP	Construction Environmental Management Plan
CTMP	Construction Traffic Management Plan
DG	Dust Deposition Gauge
DP&E	Department of Planning and Environment
DRE	NSW Department of Trade and Investment, Regional Infrastructure and Services – Division of Resources and Energy
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental Management Strategy
EP&A Act	Environmental Planning and Assessment Act 1979 (NSW)
EPA	Environment Protection Authority
EPL	Environment Protection Licence
HVAS	High Volume Air Sampler
INP	Industrial Noise Policy
LCC	Lithgow City Council
LDP	Licenced Discharge Point
MCW Environmental	MCW Environmental Consulting Pty Ltd
Minister	Minister for Planning, or delegate
mm	millimetre
m	Metre
Mtpa	Million tonnes per annum
NMP	Noise Monitoring Program
NOW	NSW Office of Water
NSW	New South Wales
OEH	Office of Environment and Heritage
PIRMP	Pollution Incident Response Management Plan
Project	The development as described in the EA and approved under DA SSD-5579
POEO Act	Protection of the Environment Operations Act 1997 (NSW)
REA	Reject Emplacement Area
ROM	Run of Mine
SCA	State Conservation Area
SCADA	Supervisory Control and Data Acquisition
Site	Lands described in Schedule 1 of the Development Consents of DA SSD-5579
Secretary	Secretary of Department of Planning and Infrastructure, or delegate
SoC	Statement of Commitments The Proponent's commitments in Appendix A
Springvale	Springvale Coal Pty Ltd (a subsidiary of Centennial Coal Pty Ltd)
TEOM	Tapered Element Oscillating Microbalance
Тра	Tonnes Per Annum
TSP	Total Suspended Particulate
TSS	Total Suspended Solids
SCSS	Springvale Coal Services Site
WCS	Western Coal Services
WMP	Water Management Plan

Executive Summary

MCW Environmental Pty Ltd (MCW) was engaged by Springvale Coal Pty Ltd (Springvale) to carry out an Independent Environmental Audit (IEA) of the Western Coal Services (WCS) site (referred to in the Development Consent as the Western Coal Services Project and also Springvale Coal Services Site or SCSS), located approximately 12 kilometres (km) north-west from the city of Lithgow, in the Western Coalfields of New South Wales (NSW) (the Site). Springvale Coal Pty Ltd is the operator of WCS and is a wholly owned subsidiary of Centennial Coal Company Pty Limited. Springvale Coal Pty Ltd is referred to in this report as Centennial Coal Pty Ltd (Centennial).

Schedule 5, Condition 9 of the Springvale Coal Services Development Consent (SSD-5579) dated 4 April 2014 requires Springvale to commission an Independent Environmental Audit by the end of December 2015, and every 3 years thereafter. To meet this requirement, MCW was commissioned prior to 31 December 2015 to carry out an independent audit of the WCS Project Approval. The audit site inspection was undertaken on the 4 and 5 February 2016.

The audit was completed in accordance with SSD-5579, Schedule 5, Condition 9, and MCW Environmental proposal to conduct the work dated 12 November 2015. This is the first IEA to be conducted under Development Consent SSD-5579.

The audit methodology comprised the following activities:

- Initial discussions with WCS management to organise the audit, including the provision of documentation, the site visit and timing;
- Discussions with NSW Department of Planning and Environment (DP&E) to discuss any concerns and areas for particular focus during the audit;
- Review of site compliance checklists and other documentation provided by Springvale;
- A two-day site inspection and interviews with key site personnel, on the 4 and 5 February 2016;
- Consultation with key government agencies as presented in this report;
- Review of additional documentation provided by WCS after the site inspection;
- Submission of a Draft Report to WCS outlining the audit findings; and
- Finalisation of the report based on comments from WCS.

The audit period has been defined as from 4 April 2014 (date of the Project Approval requiring the audit) to 5 February 2016 (date of site visit conducted by MCW Environmental). This report presents the findings of this audit.

The Independent Environmental Audit assessed compliance with relevant approvals, licences and management plans applicable to WCS. Detailed compliance registers identifying audit findings, comments and recommendations are presented in **Appendix A**. Non-compliances identified against relevant approvals are identified and discussed in Section 10. WCS's overall compliance status is summarised in **Table ES-1**.

Relevant Approval	Percent Compliant (%)	Number of Conditions Non-compliant	Number of Conditions Not Verified
Consent SSD 5579	86	5	6
Environmental Protection Licence 3607	97	1	1
Consolidated Coal Lease 733	100	0	0
Mining Lease 1352	100	0	0
Mining Lease 1448	100	0	0

Table ES-1 - Overall Compliance Assessment and Audit Score

Relevant Approval	Percent Compliant (%)	Number of Conditions Non-compliant	Number of Conditions Not Verified
Mining Lease 314	100	0	0
Statement of Commitments	85	2	3

In addition the scope of the audit included a review of the adequacy of the strategies, plans and programs required under the Development Approval. The findings of the adequacy review of management plans and systems is presented in Sections 6, 7, 8 and 9. A number of continuous improvement opportunities were identified and are presented.

A summary of recommended actions to improve environmental performance and compliance status are presented in Section 10.

1 Introduction

1.1 Background

MCW Environmental Pty Ltd (MCW) was engaged by Springvale Coal Pty Ltd (Springvale) to carry out an Independent Environmental Audit (IEA) of the Western Coal Services (WCS) site (referred to in the Development Consent as the Western Coal Services Project and also Springvale Coal Services Site or SCSS), located approximately 12 kilometres (km) north-west from the city of Lithgow, in the Western Coalfields of New South Wales (NSW) (the Site). Springvale Coal Pty Ltd is the operator of WCS and is a wholly owned subsidiary of Centennial Coal Company Pty Limited. Springvale Coal Pty Ltd is referred to in this report as Centennial Coal Pty Ltd (Centennial).

Schedule 5, Condition 9 of the Springvale Coal Services Development Consent (SSD-5579) dated 4 April 2014 requires Springvale to commission an Independent Environmental Audit by the end of December 2015, and every 3 years thereafter. To meet this requirement, MCW Environmental was commissioned prior to 31 December 2015 to carry out an independent audit of the WCS Project Approval. The audit site inspection was undertaken on the 4 and 5 February 2016.

The audit was completed in accordance with SSD-5579, Schedule 5, Condition 9, and the MCW Environmental proposal to conduct the work dated 12 November 2015. This is the first IEA to be conducted under Development Consent SSD-5579.

The audit team was approved by DP&E in a letter dated 9 October 2015.

The audit period has been defined as from 4 April 2014 (date of the Project Approval requiring the audit) to 5 February 2016 (date of site visit conducted by MCW Environmental). This report presents the findings of this audit.

1.2 Audit Scope

The audit was conducted in accordance with the requirements set out in Development Consent SSD-5579, Schedule 5, Condition 9 as detailed in **Table 1-1**.

Project Approval Condition	Requirement	Where Addressed in this Report
5.9	By the end of December 2015, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:	This Report
5.9(a)	be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;	Section 2
5.9(b)	include consultation with the relevant agencies;	Section 3
5.9(c)	assess the environmental performance of the development and assess whether it is complying with the requirements in this consent and any relevant EPL/s and/or Mining Lease/s (including any assessment, plan or program required under these approvals);	Sections 6, 7, 8, 9 and 10 & Appendix A
5.9(d)	review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and	Section 6, 7, 8 and 9

Table 1-1 - Scope of Work

Project Approval Condition	Requirement	Where Addressed in this Report
5.9(e)	recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals.	Sections 4 to 10 of this report
	Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Director-General (no specialists were required by the Director General).	Section 2

1.2.1 Audit Methodology

This IEA was undertaken in accordance with MCW Environmental Proposal (dated 12 November 2015) to meet the scope outlined above in **Table 1-1**.

Compliance checklists were developed by MCW Environmental that included a list of conditions and commitments to be assessed for compliance, including Development Consent (SSD-5579), Western Coal Services Environmental Assessment Statement of Commitments and Environment Protection Licence (EPL) No.3607. These are discussed in the Compliance Review Section 5 and Appendix A.

The audit included limited use of the Centennial compliance database to demonstrate compliance by viewing evidence of documents associated with each aspect of the various approvals and associated plans, programs and strategies. WCS management reported that the site's compliance database will shortly be updated to better reflect the more intuitive database used at other regional Centennial sites.

The Audit was carried out in accordance with *ISO 19011:2014 Guidelines for auditing management systems* (ISO, 2014), which superseded the ISO 14000 series.

The audit methodology comprised the following activities:

- Initial discussions with WCS management to organise the audit, including the provision of documentation, the site visit and timing;
- Discussions with NSW Department of Planning and Environment (DP&E) to discuss any concerns and areas for particular focus during the audit;
- Review of site compliance checklists and other documentation provided by WCS;
- A two-day site inspection and interviews with key site personnel, on the 4 and 5 February 2016;
- Consultation with key government agencies as presented in this report;
- Review of additional documentation provided by WCS after the site inspection;
- Submission of a Draft Report to WCS outlining the audit findings; and
- Finalisation of the report based on comments from WCS.

This report provides a summary of findings including details of non-compliances identified in the audit, an audit score (percentage compliant), and recommended actions to improve compliance status.

This report presents a summary of findings including details of non-compliances identified in the audit, an audit score (percentage compliant) and recommended actions to improve compliance status.

1.3 Documents Reviewed

The following information was reviewed during the audit process:

- Development Consent SSD-5579;
- Environmental Protection Licence (EPL) No. 3607;

- Management Plans as provided by WCS;
- Site environmental plans, procedures and checklists;
- Selected records of competency, induction and training;
- Selected meeting minutes;
- Selected reports; and
- Evidence of selected monitoring and review.

Documents used as part of the audit are also referenced as part of the text discussing compliance status in **Appendix A**.

1.4 Personnel and Timing

In accordance with SSD-5579, Schedule 5, Condition 9 the audit was to be conducted by a qualified, experienced and independent team of specialists whose appointment has been endorsed by the Director-General. The audit team comprised of the following personnel, as approved by the Secretary (letter dated 9 October 2015 presented in **Appendix B**):

- Michael Woolley, Lead Auditor (MCW Environmental); and
- Nick Ballard, Auditor (AECOM Australia Pty Ltd).

Michael Woolley and Nick Ballard are registered by Exemplar Global as a Certified Lead Auditors for Environmental Management and Compliance Auditing. The site visit for the audit was conducted on 4 and 5 February 2016 by Michael Woolley and Nick Ballard.

Personnel responsible for the management at WCS interviewed during the site visit included the following:

- Tony Nolan, Environment and Community Coordinator;
- Geoff Rapson, Coal Distribution Manager West;
- Glenn Anderson, Site Supervisor;
- WCS control room operators; and
- Wallerawang Landscapes Pty Ltd (contractors to WCS).

1.5 Sensitive Information

It is understood that information collected during the audit may be sensitive. Documents used during the audit to verify compliance were kept secure and not distributed outside the relevant personnel involved in the audit.

1.6 Format of Report

The format of this report is as follows:

- Section 1 is introductory and defines the scope and nature of the audit;
- Section 2 describes WCS operations as observed during the site inspection;
- Section 3 summarises the consultation with key regulatory agencies;
- Section 4 provides an assessment of the environmental performance of the development and its effects on the surrounding environment;
- Section 5. describes the approach to the assessment against the relevant standards, performance measures and statutory requirements;
- Section 6. presents the findings of the review of the adequacy of the Environmental Management Strategy and environmental management and monitoring plans
- Section 7. presents a summary of findings related to water management
- Section 8. presents a summary of findings related to noise management
- Section 9. presents a summary of findings related to rehabilitation

- Section 10. summarises the non compliances and recommendations made throughout the report.
- Section 11. provides the limitations of the report.

Appendix A is a tabulated review of the results of the assessment against the CoA and Statement of Commitments (SoCs) of Development Consent SSD-5579 and Environmental Protection Licence 3607.

2 Western Coal Services Operations

2.1 Site Description

WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reject and tailings emplacement facility comprising a coal distribution network operated by Springvale Coal Pty Ltd, a wholly owned subsidiary of Centennial Coal Pty Ltd. The Site is located off Castlereagh Highway approximately 15 kilometres (km) north of the township of Lithgow, NSW (refer to **Figure 2-1** and **Figure 2-2**). The Site is bordered by the Blackmans Flat Village to the east, Ben Bullen State Forest to the south and the Mount Piper Power Station and ash placement area to the north-west.

Coal produced from underground mining at Springvale Colliery is sized at the Screening and Crushing Plant located adjacent to the ROM stockpile at Springvale Colliery. The sized product is then delivered directly to either Mount Piper Power Station or WCS by overland conveyor. This product is stockpiled at WCS for processing in the Coal Handling Preparation Plant (CHPP) or for delivery to Mount Piper Power Station. Coal is also delivered from the site via overland conveyor to the Centennial Coal owned and operated Lidsdale Siding for export. Coal was formerly supplied from the Site to Wallerawang Power Station; however, the power station ceased operations in March 2014.

The Site employs 22 people and can operate 24 hours per day, 7 days a week.





(Source: Esri Digital Globe, GeoEye, Earthstar Geographics, CNES/Airbus DS USDA, USGS, AEX Getmapping, Aerogrid, IGN)



Figure 2-2 – Overview of Springvale Coal Services Layout

(Source: RPS, 2013¹, Figure 5, p.11)

¹ RPS Australia East Pty Ltd, 2013, Environmental Impact Statement Western Coal Services Project, 29 July 2013, Ref: PR110910

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The WCS site consists of the following:

- Springvale Coal Services Site including infrastructure on Consolidated Coal Lease (CCL) 773 and Mining Lease (ML) 1448;
- Private haul roads between Angus Place Colliery and Mount Piper and Wallerawang Power Stations referred to as the Angus Place – Mt Piper Haul Road and the Angus Place – Wallerawang Haul Road;
- Overland conveyors (OL-1, OL-2, OL-3, OL-4 and OL-5) linking Springvale Coal Mine, Wallerawang and Mount Piper Power Stations, the Springvale Coal Services Site and Lidsdale Siding; and
- The Kerosene Vale coal stockpile area located along the Wallerawang Haul Road.

The overland conveyor (comprising OL-1, OL-2, OL-3, OL-4 and OL-5) links the Springvale Colliery pit top to the WCS, Mt Piper Power Station and Wallerawang Power Station. The conveyor structure runs the entire route, approximately 10 km in length. ROM coal from the Springvale Colliery travels on the upper belt to the WCS CHPP. Washed or processed coal for export travels on the return strand of the belt from the CHPP to Lidsdale Siding. The conveyor system was observed to be covered on two sides with sheeting (top and side) and a removable galvanised wire-mesh screen that runs down the full length of the exposed side of the conveyor as well as down the covered side and under the conveyor. Access across the conveyor route is provided for stock and general landholder access. A service and access road is located adjacent to the conveyor for the majority of the route, except in sections where a nearby road is present.

Mt Piper Power Station is situated on land immediately west of the Site. The village of Blackmans Flat consisting of residential dwellings (now mostly purchased by Centennial Coal), is located east of the Site. Pine Dale Coal Mine, owned by Energy Australia is located north of the Site on the northern side of the Castlereagh Highway. A compartment of the Ben Bullen State Forest is located to the south of the Site. The main area of Ben Bullen State Forest is located to the north of the Angus Place and Mt Piper Haul Road. The Newnes State Forest is located to the east of the Angus Place and Wallerawang Haul Road and the Kerosene Vale Coal Storage area. Land located between the Site and the village of Lidsdale and land containing the majority of the overland conveyors and private haul roads is generally cleared grazing land with scattered trees and rural residential properties.

WCS is located within the Coxs River Valley. The topography is generally open and undulating, located on the valley floor approximately at 940 m Australian Height Datum (AHD).

Nearby surface water courses include Wangcol Creek which is located approximately 30 metres (m) north of the Castlereagh Highway. Wangcol Creek (also referred to as Neubecks Creek) flows into the Coxs River located approximately 2.5 km east of the Site. The Site is bounded by Lamberts Gully on the east and Huon Gully on the west, both of which flow northward to Wangcol Creek. The Coxs River flows generally south towards Wallerawang Power Station flowing beneath the overland conveyor from the Springvale Coal Mine to the Springvale Coal Services Site before discharging into Lake Wallace which is part of the water supply system for Delta Electricity.

For the purposes of managing the site, WCS has been divided into the following 'Domains':

- Domain 1 Washery and CHPP: this area includes the coal processing area, coal stockpiles, associated conveyors, access roads and storm water dams;
- Domain 2 REA: this area incorporates both the existing approved REA and the expanded REA;
- Domain 3 Co-Disposal REA: this incorporates the old tailings dams and Retention Dam;
- Domain 4 Cooks and DML dams and other water management structures;
- Domain 5 Previous rehabilitation work and offsets associated with the Lamberts Gully Open Cut Mine;
- Domain 6 Kerosene Vale Site; and

• Domain 7 - Haul roads (if built) and conveyors.

The nearest privately owned residences to the Site are located in the village of Blackmans Flat located approximately 300 m to the south of the Site. WCS reported that after an acquisition process undertaken by Centennial Coal, there is only one remaining resident in Blackmans Flat.

2.2 History

RPS Australia East Pty Ltd prepared the Environmental Impacts Statement (EIS) for SSD-5579 and describes this history of the Site as follows:

"Open cut mining operations within the Springvale Coal Services Site commenced in 1940, extracting coal from the Lidsdale and Lithgow seams. Underground operations commenced in 1942 with the Western Main underground entries opposite the existing Washery, and the Eastern Main Mine being where the current tailings dams are located, near the main entrance to the Springvale Coal Services Site.... The previous underground workings mined the Lithgow seam until the 1990s. Between 1980 and 1994, three separate open cuts were developed which extracted the remaining coal south of the Castlereagh Highway, from Mount Piper Power Station to the Springvale Coal Services Site entrance.

The Lamberts Gully Open Cut Mine was operational from 1994 to 2010 and extracted coal from both north and south of the OL. Springvale Coal purchased the Springvale Coal Services Site in October 1994 from Novacoal, who, under a 1992 development consent relating to the main Springvale Coal Mine, constructed the OL, coal stockpile facilities and reject disposal facilities. The Washery was built in the early 1970s for production of export steaming coal that was trucked across the Castlereagh Highway to the Wallerawang Rail Siding (now dismantled and part of the Pine Dale Mine site). This Washery was upgraded in 1995.

Springvale Coal Mine, an underground mining operation, was approved in 1992 and developed in 1995 to supply coal to Mt Piper Power Station by OL via the old Western Main site – now referred to as the Springvale Coal Services Site. The original approval included the ability to process coal for export via the same OL to Lidsdale Siding. A subsequent modification (MOD) in 1995 to the original 1992 development consent (DA 11/92) allowed the construction of a short conveyor link to Wallerawang Power Station" (RPS, 2013, p.10).

The City of Lithgow owns the Blackmans Flat Waste Management Facility (WMF) within the WCS in the vicinity of the old Huon open cut located between the Washery and Mount Piper Ash Emplacement. The proposed WMF will replace the current Council landfills; however, the current timeframe for the development is unknown. The Water Management Plan (RPS, 2014, p. 65) notes that "*The proposed development includes the preparation of the mine void for landfilling, and construction of a waste transfer station and recycling facility, weighbridge, road access and associated developments. Also the landfilling of solid and inert waste with a "dry tomb" in the order of 35,000 to 40,000 tonnes per annum for a period of approximately 15 years; and the storage and transfer of recyclable waste including scrap metal, glass and plastics, paper and cardboard, green waste and other recoverable materials. The Development Assessment Report (Geolyse 2006) was prepared in 2006 and subsequently site conditions have changed. The proposed landfill lies within the so-called Council Pit, which is currently inundated".*

2.3 Approvals and Licences

WCS operates under the Springvale Colliery Environment Protection Licence (EPL) No. 3607 administered by the Environmental Protection Authority (EPA). The NSW Department of Planning and Environment (DP&E) granted Approval SSD-5579 on 4 April 2014 for Project. No modifications have occurred to SSD-5579 since 4 April 2014.

Table 2-1 identifies the major approvals, licences in place for WCS and provides relevant information where applicable.

Issuing / Responsible Authority	Type of Lease, Licence, Approval	Date Granted	Expiry
Minister for Planning (Planning and Infrastructure NSW)	Project Approval (PA SSD- 5579)	4 April 2014	30 June 2039
Environmental Protection Authority (EPA) ^{Note 1}	Environmental Protection Licence No. 3607	-	
Department of Industry Resources and Energy	Consolidated Coal Lease 733	23 May 1990	3 July 2027
	Mining Lease 1352	26 May 1994	2036
	Mining Lease 1448	31 May 1999	-
	Mining Lease 314	3 August 1993	3 August 2035

Table 2-1 - Summary of Major Approvals and Licences

Note 1 Issued to Springvale Colliery.

There have been 22 variations to EPL 3607 since 2001 (many of which are administrative) pursuant to the *Protection of the Environment Operations Act 1997* (NSW). Four of these variations occurred during the audit period (refer to Section 5.1 for further details).

2.4 Description of Site Operations

The following three ROM stockpiles are associated with the management at WCS:

- **Springvale Services ROM Coal** represents Run of Mine (ROM) coal which has been delivered from Springvale Colliery via overland conveyor that has been sized at Springvale Colliery but has not been washed through the WCS CHPP.
- Springvale Coal Services Washed Coal represents coal that has been delivered from Springvale Colliery via overland conveyor and that has been washed through the WCS CHPP.

Coal fine reject (tailings) produced at the CHPP, at the time of the site inspection, were pumped to the Co-Disposal Ponds; however, Stage 1 of the new REA was due to be formally signed off shortly after the site inspection thus allowing tailings to be pumped to the Stage 1 REA.

The key operational activities of WCS include:

- Receiving up to 9.5 million tonnes of coal per annum (Mtpa);
- Processing of up to 7 Mtpa;
- Delivery of coal by the existing overland conveyor system from the Centennial Coal Springvale Colliery;
- Washing of coal on-site;
- Maintenance of on-site infrastructure and Site amenities;

During the audit period the following activities were completed at WCS:

- Upgrades to the water management system.
- Weed spraying and monitoring was undertaken adjacent to rehabilitation areas.
- Weed spraying was completed in disturbed areas.
- Upgrades to the Washery to increase the feed rate up to 450 tonnes per hour.
- Installation of a weather station

- Installation of the directional noise monitor or noise compass
- Upgrades to the CHPP, including, but not limited to removing redundant coal jig, installation of 0.75 millimetre (mm) screen panels and reinstatement of a 10 mm lower deck on raw coal sizing screen.
- Construction of Stage 1 of the new REA and preparation for construction of Stage 2 works.
- Upgrades to 'A' Pit to change from a REA to a decant dam for the new REA.
- Installation of sediment and erosion controls (rock dams) across the WCS, including conveyors OL-1 to OL-5.
- Installation of an oil store with bunded cabinets under an awning.

No exploration was carried out at the site during the audit period and WCS management reported that there are no plans for future exploration on the WCS site.

WCS production figures for the audit period were sighted. The following ROM coal handled was reported:

- 2014: 3,487,621 tonnes of ROM received.
- 2014: 2,311,037 tonnes of ROM coal processed.
- 2015: 3,853,628 tonnes of ROM received and processed.

2.5 Activities Occurring During Site Audit Inspection

The following activities were observed during the site inspection, as outlined below:

- Transport of coal from Springvale Mine
- Washing of coal.
- Management of washed coal and coal rejects.
- Completion of the expanded Stage 1 REA.
- Commencement of Stage 2 REA.
- Water management.
- Transport of coal to Mt Piper power station and to Lidsdale Siding by conveyor.

Photos of environmentally significant aspects of the operation, taken during the site inspection on 4 and 5 February 2016, are provided throughout the report.

Plans of the Site, locations of monitoring can be found in Annual Review report(s) (AR) found on the WCS website.

3 Consultation with Key Government Agencies

As part of the audit process, MCW Environmental contacted key government agencies to seek their views on the environmental performance of WCS.

3.1 NSW Department of Planning and Environment (DP&E)

MCW Environmental contacted the Department of Planning and Environment (DP&E - Resource and Assessments Branch) on 8 February 2016. DP&E indicated that the key area of concern related to noise levels and compliance with noise criteria as defined by the Development Consent.

3.2 NSW Environment Protection Authority (EPA)

Feedback was sought by MCW Environmental on 13 and 14 January 2016 from the EPA officer responsible for WCS who noted the following:

- WCS has not applied for a standalone EPL for activities approved under PA SSD-5579. The EPA officer reported that the EPA wrote to DP&E in October 2013 advising that WCS would need to apply for a separate licence for the site. No documentation was available for review to confirm this. At the time of writing this IEA an application for a standalone EPL for WCS had not occurred and as a result the EPA considers EPL 3607 is not consistent with criteria specified in PA SSD-5579.
- The EPA investigated night time noise complaints in Lidsdale area of Skelly Road in January, February and March 2015. The EPA investigation identified that night time noise from the WCS coal washery was equal to or greater than 42 dB(A) at a Skelly Road private residence. The SSD-5579 noise limit is 35 dB(A) (Condition 7, Schedule 3). As the activities approved under SSD-5579 have not been applied for/obtained in a variation to EPL 3607 or new separate licence as requested by EPA in their letter to DP&E in October 2013 the EPA considers the noise exceedances are only in breach of the consent conditions.

Refer to Section 5.1.1 for further details concerning the EPL issue raised by the EPA. Refer to **Appendix A**, Condition 7, Schedule 3 for details concerning noise issues.

The EPA officer requested the IEA consider the following issues:

- The discharge of surface water to Neubecks Creek (Wangcol Creek). No limits have been applied for by WCS concerning discharge from LDP-006 into Neubecks Creek. The EPA requires monitoring of LDP-006 and are aware that discharges generally have high electrical conductivity (EC) levels (up to 3,000 4,000 µs/cm) and that these may be increasing. The EPA officer reported that Neubecks Creek receiving waters are generally less than 500 µs/cm.
- The EPA noted that Cooks Dam and the DML dam located at the Site may be impacted by water from historical underground workings and that this water may be finding its way to LDP006 or seeping directly to Neubecks Creek.

Refer to Section 7 and **Appendix A** Conditions 20, Schedule 3 of SSD-5579and L1.1 of EPL 3607 for further details concerning the above issues

3.3 NSW Department of Industry Resources and Energy (DRE)

Feedback was sought on 13 January 2016 from the Environmental Sustainability Unit of the NSW Dept of Industry, Division of Resources and Energy (DRE) who provided the following comments concerning the IEA:

• "Some issues have been identified with rehabilitation performance including a sink hole developing in rehabilitated areas (since repaired) and some areas where rehabilitation and revegetation has not been successful, particularly on steeper slopes.

 The activities in the Reject Emplacement Area should be assessed and the area checked for potential environmental issues such as erosion and leakage. The effectiveness of water management systems including dams and drainage channels should be assessed in the audit" (DRE, 2016, pers. comms²).

² DRE, 2016, Email, 1 February 2016 Western Coal Services - Independent Environmental Audit [15:30hrs]

4 Environmental Performance

This Section addresses the requirement of the scope of works to "assess the environmental performance of the development" by providing an overview of the compliance status for WCS; listing the environmental management and monitoring plans used by WCS to manage and assess environmental performance and discusses complaints received by the mine and incidents reported during mining activities as further indicators for environmental performance. Compliance with Approvals and Licences is also a key indicator of environmental performance and is discussed in Section 5. Environmental performance for the key aspects of water; noise and rehabilitation is presented in Sections 6, 7 and 8 respectively.

4.1 Monitoring Plans

WCS has developed the following management / monitoring plans and programs to monitor the environmental performance of the project and mitigate its effects on the surrounding environment:

- Environmental Management Strategy.
- Water Management Plan.
- Noise Management Plan.
- Air Quality Management Plan.
- Construction Environmental Management Plan (CEMP).
- Construction Traffic Management Plan (TMP)
- Rehabilitation Closure Plan.
- Pollution Incident Response Management Plan (PIRMP)

The auditors based the assessment of the environmental performance of the Project on the assessment of implementation of the above management and monitoring plans as well as the assessment of compliance with the CoA, SoC and EPL. The findings of this assessment are provided in the Compliance Matrix presented in **Appendix A** with the identified non-compliances and associated recommendations summarised in Section 10.

The adequacy of the above management plans has been assessed in Section 7 of this report.

In addition, to further evaluate the Project's environmental performance, the auditors reviewed the environmental incidents and complaints recorded during the audit period. The discussion of incidents and complaints is provided below.

4.2 Incident Management

Centennial Management Standard 012 – External Environmental Reporting (EER Standard) provides standardised procedures to follow in the event of an environmental incident. The EER Standard states that Centennial sites, including WCS, are to follow the environmental incident reporting procedures provided in the EER. Environmental incidents are categorised according to the severity of the incident, the remediation actions required, and the extent of regulatory action (if any). Categories are numbered from 1 to 5, as shown below:

	Category and Definition		
1	Prosecution (Major)	 major actual or potential material harm to the environment; and major remediation required; or the company has been convicted of the offence in a court of law 	
2	Offence (Significant)	 significant potential or actual material harm to the environment; and significant remediation required; or a penalty notice has been received 	
3	Reportable (Moderate)	 reportable incident to government agency as a condition of approval/licence or as required by legislation; and environmental harm has occurred (either on or off site) or is likely to occur (either on or off site) (using process described in Attachment 2); or incident outside predictions; or incident or complaint exceeds controls identified in management systems (including management plans, procedures and monitoring programs) 	
4	Technical (Minor)	 licence/approval/standard exceedance or non-compliance; and no environmental harm (using process described in Attachment 2); and incident or complaint that exceeds controls identified in management systems (including management plans, procedures and monitoring programs) that is not a Category 3 incident, ie has not caused harm or is not outside predictions. 	
5	Incident (Low)	 Incident or complaint – on site only within limits of the approved management plan or monitoring program; and No environmental harm with no need for remediation 	

Figure 4-1 - Categories of Environmental Incidents

The EER identifies amendment to the *Protection of the Environment Operations Act 1997*, (POEO Act) requiring the EPA to be notified immediately after a person carrying out an activity becomes aware of a pollution incident that causes or threatens material harm to the environment. Once immediately reported to the EPA (and/or other relevant authorities, as required), the site must undertake an internal investigation to assess whether environmental harm has occurred or is likely to occur and the materiality of such harm. The EER provides guidance in the identification of environmental harm and materiality. Also included in the EER is a document to guide reporting of an environmental incident to the EPA Environment Hotline, and a template written report, to provide the EPA (and/or relevant authority) written notification of the incident, in accordance with Part 5.7 of the POEO Act and condition R2.2 of the site's EPL.

The Environmental Co-ordinator is responsible for reviewing the outcomes of the environmental incident investigation process, closing out the incident once the investigation has been completed, reporting the incident to appropriate regulatory authorities as per the EER and coordinating any corrective or preventative actions to be instigated. The outcomes of the incident investigation and any corrective or preventative actions is discussed with staff at the daily management meeting and be made available to the workforce if approved by the Mine Manager as a "HSEC alert" via email. WCS maintains electronically a record of environmental incidents in the ECD and a hardcopy of WCS "Incident/Accident Form" retaining the details of environmental incidents, investigations and corrective or preventative actions.

The site's Pollution Incident Response Management Plan (PIRMP) contains details of how employees should respond to an environmental incident. Appendix 2 contains a copy of the Duty Card (T001) – Incident Report and Detail Form, Record of Pollution Compliant and Site Location and Catchment Plan.

Table 4-1 summarises the number of incidents recorded by category.

Table 4-1 - Summary of Incidents Recorded by Category Period 30 July 2014 – 2 December 2015

Category	No. of Incidents
1: Prosecution (Major)	0
2. Offence (Significant)	0
3. Reportable (Moderate)	0
4. Technical (Minor)	23
5. Incident (Low)	1

As shown in **Table 4-1** - Summary of Incidents Recorded by Category Period 30 July 2014 – 2 December 2015

WCS did not record any major (Category 1 - Prosecution), significant (Category 2 – Offence) or moderate (Category 3 – Reportable) incidents between 30 July 2014 and 2 December 2015.

Table 4-2 and Table 4-3 summarise the Category 4 and 5 incidents for the audit period.

Table 4-2 - Summary of Category 4 Incidents Recorded (30 July 2014 and 2 December 2015)

Date	Category	Description	WCS Investigation / Cause	WCS Remedy
02/12/2015	Noise	Noise exceedance at NM6 (Wolgan Road) and NM7 during the evening and night period.	Noise from the overland conveyor caused the exceedance.	Noise attenuation along the conveyor is being evaluated.
11/11/2015	Noise	Noise monitoring recorded an exceedance of the night noise criteria at NM6.	Noise from the overland conveyor caused the exceedance.	Noise attenuation along the conveyor is being evaluated.
21/08/2015	Water	A leak was detected on the 'A' Pit REA external wall. Repairs were immediately undertaken under the supervision of a geotechnical specialist. Monitoring of the A Pit REA will be ongoing.	Inspection conducted by GHD Pty Ltd (Geotechnical Engineer). Water followed a pathway through a section of the A Pit REA wall.	Ongoing monitoring and pumping water back to the A Pit REA as required. A reverse filter is in place over the seepage area on the external dam wall to prevent a piping failure in the wall.
19/08/2015	Water	The sump at transfer tower No.3 over flowed.	The frequency of sump cleaning at transfer tower No.3 was not adequate to clear the amount of coal material at the facility.	Weekly scheduled cleaning of the transfer tower No.3 sump.
21/07/2015	Noise	Noise monitoring recorded an exceedance of the noise criteria at NM7.	Maintenance work being undertaken on transfer tower No.1 was the root cause of the noise exceedance.	Noise attenuation along the conveyor is being evaluated.
03/07/2015	Water	Seepage detected along external batter of the A Pit REA wall during a routine site inspection.	Inspection conducted by GHD Pty Ltd (Geotechnical Engineer). Water seepage was identified through rock strata on the inside batter of the A Pit REA wall. Monitoring the seepage area on the A Pit REA is ongoing. The work was supervised by a GHD geotechnical engineer.	A reverse filter was installed over the seepage area on the external dam wall to prevent a piping failure in the wall. Bentonite was mixed with sand and incorporated into the rock strata on the inside batter of the A Pit REA.

Date	Category	Description	WCS Investigation / Cause	WCS Remedy
25/06/2015	Noise	Noise monitoring recorded an exceedance of the noise limits at NM1, NM6 and NM7.	The CHPP was generally responsible for the exceedance at NM1. The overland conveyor was generally responsible for the noise limits at NM6 and NM7.	Noise attenuation along the conveyor is being evaluated.
27/05/2015	Noise	Noise monitoring recorded an exceedance of the noise limits at NM6 and NM7.	The overland conveyors are generally responsible for the exceedance of the noise limits.	Noise attenuation along the conveyor is being evaluated.
27/04/2015	Noise	Activities from WCS complied with the relevant development consent noise limits during the monitoring event except NM4, NM6 and NM7.	WCS overland conveyors were responsible for the site only noise levels at NM4, NM6 and NM7.	Noise attenuation along the conveyor is being evaluated.
24/03/2015	Noise Note 1	The resident advised of increased noise disturbance from the overland conveyor.	An inspection of the belts failed to detect any abnormal operation of the conveyor adjacent to the property. The complaint appears to have originated from a visitor staying in a caravan on the property.	The resident was advised there were no defects identified on the overland conveyor adjacent to the property. A copy of the March 2015 monitoring results was provided.
17/03/2015	Noise	Noise monitoring at NM6 and NM7 recorded an exceedance of the noise limits for the day, evening and night period.	The overland conveyor was generally responsible for the noise exceedance.	Noise attenuation along the conveyor is being evaluated.
09/03/2015	Noise ^{Note 1}	Complaint logged with the Springvale Colliery Control Room regarding abnormal noise from the overland conveyor.	The coal technicians investigated the overland conveyor for abnormal noise emissions. The investigation identified that the issue either self- corrected or was not related to the overland conveyor system. The complainant advised the noise was no longer evident when contacted at approximately 10am on the 9 March 2015.	No further action required.
18/02/2015	Noise	An exceedance of noise criteria limits was recorded for the evening and night period at NM6 and NM7.	The overland conveyor system was generally responsible for site noise exceedance.	Noise attenuation along the conveyor is being evaluated.
05/02/2015	Noise Note 1	Abnormal conveyor roller noise identified by resident.	Defective roller identified adjacent to Skelly Road.	Roller was replaced on 5 February 2015.
30/01/2015	Noise	Exceedance of night-time noise criteria at NM4, NM6 and NM7. Day time noise criteria were exceeded at NM6.	Overland conveyors were generally responsible for noise exceedances.	Noise attenuation along the conveyor is being evaluated.
29/01/2015	Noise	Exceedance of daytime noise criteria at period NM6. Exceedance of evening noise criteria at NM6, and night- time criteria at NM4, NM6 and NM7.	Overland conveyors were responsible for noise exceedances.	Revise NIA. Noise attenuation along the conveyor is being evaluated by Hatch.
28/01/2015	Noise Note 1	A resident of Wolgan Road complained of a	An inspection detected a failed roller on the conveyor and it was	Defective roller was removed.

Date	Category	Description	WCS Investigation / Cause	WCS Remedy	
		noisy roller on the overland conveyor system.	subsequently removed an hour after the complaint was received.		
17/12/2014	Noise	Day-time noise exceedance at NM6.	Haul truck tyre noise on the Mount Piper haul road was responsible for	Noise attenuation along the conveyor is being	
		Evening noise criteria exccedances at NM1, NM3 and NM6.	exceedances at NM1 and NM3. A conveyor continuum was responsible for the noise exceedance at NM6.	evaluated.	
		Night-time noise exceedances at NM1, NM3 and NM6.			
13/11/2014	Noise	Evening noise criteria exceedances at NM1, NM2, NM6 and NM7 and night –time measurements at NM1, NM2, NM3, NM6 and NM7.	Haul truck tyre noise on the Mount Piper haul road was responsible for the noise exceedance at NM1, NM2 and NM3. A conveyor continuum was responsible for noise exceedance at NM6 and NM7.	Noise attenuation along the conveyor is being evaluated.	
16/10/2014	Noise	Evening noise criteria exceedances at NM1, NM2, NM3, NM4 and NM7.	Haul truck tyre noise on the Mount Piper haul road was responsible for the noise exceedance at NM1, NM2, NM3, NM4 andNM5. A conveyor continuum was	Noise attenuation along the conveyor is being evaluated.	
		NM2, NM3, NM4 and NM5.	responsible for the noise exceedance at NM7.		
21/09/2014	Noise	Day-time noise exceedances at NM7.	Haul truck tyre noise on the Mount Piper haul road was responsible for	Noise attenuation along the conveyor is being	
		Evening noise exceedances at NM1, NM2, NM3 and NM7.	MM2, NM3 . A conveyor continuum was responsible for exceedance at NM6 and NM7.	evalualeo.	
		Night-time noise exceedances at NM1, NM3, NM5 and NM6.			
29/08/2014	Noise	Evening noise exceedances at	A conveyor continuum was responsible for noise exceedance at	Noise attenuation along the conveyor is being	
		NM1, NM4 and NM7. Night-time noise exceedances at NM7.	NM7.	evaluated.	
30/07/2014	30/07/2014 Noise Evening noise Haul truck tyre noise on exceedances at NM6 and Piper haul road was res NM7. the noise exceedance a	Haul truck tyre noise on the Mount Piper haul road was responsible for the noise exceedance at NM1,	Noise attenuation along the conveyor is being evaluated.		
		Night-time noise exceedances at NM1, NM2, NM4, NM5, NM6 and NM7.	NM2, NM4, NM5. A conveyor continuum responsible for the noise exceedances at NM6 and NM7.		

Note ¹Community Complaint

Date	Category	Description	WCS Investigation / Cause	WCS Remedy
17/11/2015	Category 5 (PIRMP Test Scenario)	PIRMP Test - A coupling on the flocculent pipeline to the Co Disposal Ponds failed resulting in the discharge of flocculent into the clean water drain. Flocculent was contained on-site and within the Retention Pond.	PIRMP Test - Earthmoving plant operating in the vicinity of the retention pond tracked over the pipeline causing a pressure increase within the pipeline resulting in the failure of the pipeline coupling.	PIRMP Test - The alignment of the pipeline was changed to improve the surveillance of the pipeline.
08/12/2014	Water	The sample taken at LDP-006 indicated a 6.39 pH. The concentration limit for pH is 6.5-8.5 in EPL 3607.	Analysis of the Pinedale Weather Station data received on the 5/01/2015 recorded 56.2 mm of rain over the previous five consecutive days to the 08/12/2014.	An interpretation of L2.5 against the rainfall data indicated that exemption L2.5 and exemption L2.5b applied during December 2014.

Table 4-3 - Summary of Category 5 Incidents Recorded (30 July 2014 and 2 December 2015)

The above incidents were observed to be logged in the Centennial ECD Lotus Notes database, each with a unique reference number.

During the consultation process for this IEA the EPA noted that they had investigated night time noise complaints in the Lidsdale area of Skelly Road in January, February and March 2015. The EPA investigation identified that night time noise from the WCS coal washery was equal to or greater than 42 dB(A) at a Skelly Road private residence. The SSD-5579 noise limit is 35 dBA (Condition 7, Schedule 3). The complaints referred to by the EPA correlate with those listed in **Table 4-2**.

Refer to Condition 7, Schedule 3 **Appendix A** and Section 8 for further details concerning noise management.

Recommendations:

Refer to REC-2016-16 and REC-2016-17 (Condition 7, Schedule 3 Appendix A).

4.2.1 Reported Incidents

The Site maintains a PIRMP as well as CMO – External Incident Reporting process that describes the requirements and processes in relation to the external reporting of environmental incidents requiring external notification under legislation/approval conditions.

In a letter dated 20 March 2015 DP&E requested further information from the site concerning Condition 17 – Schedule 3, Condition 4 – Schedule 2, Condition 8 – Schedule 3 and Condition 3 -Schedule 4 following review of the Annual Review. Centennial responded to DP&E in a letter dated 23 April 2015 (Centennial, 2015) noting that plans where requested had been updated and also supplied noise information as requested in DP&E's letter.

4.3 Complaint Management

A Community information line (02 6355 9500) is maintained by WCS. The number reports to the WCS control room that is manned 24 hrs a day. The caller's details are recorded and passed on to the relevant Centennial member of staff. The Record of Pollution Complaint was observed in the control room during the site inspection. Four complaints were received in the period January to March 2015 (refer to **Table 4-2**).

Complaints are logged by the Environmental Co-ordinator within Lotus Notes (using the ECD system). The log includes the following information: reference number, complainant details, complaint type,

date and time of occurrence, complaint details, investigation / cause, remediation details, implementation process, implementation date and details of consultation.

A screen-shot summary of complaints for the audit period in the WCS ECD was provided, which numbered four in total with each categorised as Category 4 (Minor) Environmental Incidents. Noise related incident investigation reports dated 28 January 2015, 5 February 2015, 9 March 2015 and 24 March 2015 were available for review.

A presentation to the Centennial Western Region Community Consultative Community (CCC) for April 2015 identified that complaints were included as an agenda item and the telephone number for the community information line was tabled. It is noted that the CCC includes surrounding Centennial sites.

4.4 Compliance Management

Centennial has developed a compliance database to assist sites meet requirements of Project Approvals and associated plans, programs and strategies. The database allows conditions to be entered and actions to be automatically generated when a trigger is met. The full capability of the database was not observed during the audit; however, the database was used to demonstrate how compliance with various approvals or the EPL is managed by viewing evidence of documents attached to the relevant section of each condition. The current WCS compliance database was observed during the site inspection. WCS management reported that the database was due to be incorporated into Northern Centennial database template by end of March 2016 and that the new system would be more intuitive to use and would be able to produce reports for tracking and trending of issues.

5 Compliance with Statutory Requirements

This Section fulfils the requirement to assess whether the project is complying with the relevant requirements in its Project Approval, EPL and mining leases. Further discussion of compliance related to water, noise and rehabilitation is provided in Section 7, 8 and 9.

5.1 Key Statutory Approvals

Table 5-1 identifies the major approvals, licences in place for WCS and provides relevant information were applicable.

Issuing / Responsible Authority	Type of Lease, Licence, Approval	Date Granted / Varied / Modified	Expiry
NSW DP&E	PA SSD-5579	4 April 2014	30 June 2039
Environment Protection Authority (EPA) ^{Note 1}	Environment Protection Licence No. 3607	24/09/2001, 04/09/2002, 28/03/2003, 19/12/2003, 03/09/2004, 11/10/2004, 08/08/2005, 26/04/2006, 03/10/2006, 21/08/2007, 09/09/2009, 10/09/2010, 05/07/2011, 02/08/2012, 21/05/2013, 02/09/2013, 12/08/2014, 23/10/2014, 10/12/2014, 19/02/2015	Renewed Annually
NSW DP&E	Statement of Commitments (PA SSD-5579)	May 2013	-
DRE	CCL 733	23 December 2008	3 July 2027
	ML 1352	2 March 2015	23 June 2036
-	ML 1448	31 May 1999	
-	MPL 314	3 August 1993	3 August 2035

Table 5-1 - List of Approvals, Licences and Leases

Note 1 Issued to Springvale Colliery.

Note 2 Issued to Angus Place Colliery.

5.1.1 Environmental Protection Licences

Springvale Coal holds EPL 3607 under the *Protection of the Environment Operations Act 1997*. The licence covers both the Springvale Colliery and WCS that has two licensed surface water discharge points (LDP-006 and LDP-007).

Since 4 April 2014, the Kerosene Vale site has been managed under SSD-5579. Angus Place Colliery holds EPL 467 that covers both Angus Place Colliery and Kerosene Vale. There is one licensed discharge point (LDP-003) associated with Kerosene Vale, which is west of the Angus Place haul road. This discharge point is managed by Angus Place and has been considered under Angus Place's EPL. Therefore, compliance with EPL 467 has not been assessed as part of this audit.

The following licensed surface water discharge points apply to the Site under both EPL's:

- LDP-006 a surface water discharge point in EPL 3607 located at WCS.
- LDP-007 a surface water discharge point in EPL 3607 located at WCS.
- LDP-003 a surface water discharge point in EPL 467 located at Kerosene Vale.

Monitoring criteria for EPL's 3607 and 467 is included in the Water Management Plan. Evidence of compliance with the EPL 3607 condition relevant to the WCS are provided in **Appendix A**.

It is noted that an EIS (RPS, 2013, p.135) mitigation measure for surface water management and mitigation is that WCS will "*Apply for a separate EPL covering the entire PAA that includes LDP 003 (Kerosene Vale Stockpile Area) and LDP 006 and LDP 007 (conveyor at Duncan Street, Lidsdale).* MCW Environmental concur with this measure and the EPA's comments provided during the consultation process (Section 3.2) that EPL 3607 (and EPL 467) is not consistent with criteria specified in PA SSD-5579 and that a separate EPL is beneficial for the WCS.

WCS dust monitoring requirements are managed by criteria specified in SSD-5579.

- Three deposition dust gauges (DG3, DG4 and DG5) are located at WCS (also required under EPL 3609).
- One High Volume Air Sampler (measuring both PM10 and Total Suspended Particulates) located at Pine Dale Mine.
- One Tapered Element Oscillating Microbalance (TEOM) located in the vicinity of Blackmans Flat.

The HVAS provides real-time measurement of airborne PM_{10} concentration levels and TSP. Real-time PM_{10} concentrations are reported online, along with real-time meteorological data such as wind speed and direction, for proactive dust management. Monitoring data is manually downloaded on a monthly basis for data validation purposes. The TEOM also provides PM_{10} and operates continuously.

Recommendation:

REC-2016-01 – WCS apply for a standalone Environmental Protection Licence so that monitoring requirements are consistent with the criteria specified in PA SSD-5579.

5.1.1.1 Environmental Protection Licence 3607

The following variations relevant to WCS were made to EPL 3607 during the audit period:

- 10 December 2014 Changing the Scheduled Activity scale for Mining of Coal to 3,500,000 5,000,000 tonnes of coal produced (Condition A1.1). Removal of Pollution Studies and Reduction Programs U1 and U3.
- 12 August 2014 attached a condition that permits the licence discharge limits for LDP-006 to be exceeded where rainfall exceeds the design capacity of sediment dams provided the sediment dams are managed to retain design storage capacity following rainfall events (Conditions L2.5 and L2.6).

EPL 3607 Pollution Studies and Reduction Programs

The following pollution studies and reduction programs were active during the audit period.

Condition U1: Sediment Dam Storage Capacities

The site was required to undertake works to ensure that the Main Sediment Dam, the Stockpile Sediment Pond and the Washery Sediment Dam have the capacity to store a 95th percentile (56mm) 5 day rainfall event. Sediment was removed from the washery sediment dam in 2014 to create additional storage capacity. The dams were surveyed for storage capacity during the reporting period and the storage capacity of the dams outlined in the Site Water Management Plan (RPS, 2014). Refer to Appendix A, EPL 3607 for further details.

Condition U3: Assessment of Potential Impacts of Pollutants at LDP-006

The Site was required to monitor at LDP-006 (by sampling and obtaining results by laboratory analysis) the concentration of a range of pollutants specified in Condition U3. WCS was also required to monitor for the specified pollutants at the upstream and downstream locations within Neubecks Creek.

Following the collection of additional monitoring results up until 31 December 2013 WCS were required to undertake an assessment of the pollutants detected in water discharged from the site via LDP6 in accordance with ANZECC water quality guidelines and provide the assessment to the EPA by 28 February 2014. GHD (GHD, 2014), completed a report titled '*Neubecks Creek ANZECC and ARMCANZ 2000 Assessment Environment Protection Licence Report*' which was issued to the EPA to address Condition U3. Refer to Appendix A, EPL 3607 for further details.

The above programs were removed from EPL 3607 in the 10 December 2014 EPL variation.

5.1.1.2 Environmental Protection Licence 467

As indicated above, EPL 467 held by Angus Place Colliery covers the mining operation and surface facilities related to Angus Place Mine. LDP-003 under EPL 467 outlines the requirement to monitor water quality relating to discharge from the Kerosene Vale Sediment Dam (LDP-003). Kerosene Vale Sediment Dam is managed by Angus Place and is reported under the Angus Place Annual Review and therefore has not been considered in this audit.

5.1.2 Mining Leases

Appendix A provides a compliance assessment of the relevant mining leases for WCS.

WCS disclosed that there were two areas where historical WCS activities (approximately in 2006) were conducted slightly outside of the relevant mining leases ML1448 and CCL 733. These comprised a small earth bund on the southern boundary in ML 1448 and a section of the co-disposal ponds on State Forest lands on CCL 733. These occurred outside of the audit period hence were not considered in detail in this report.

5.2 Key Strategies, Plans & Programs

It is noted that not all approvals and licences were considered in the audit. The audit assessed compliance with the following:

- Project Approval SSD-5579 and Statement of Commitments; and
- EPL 3607 (where applicable).
- EPL 467 (where applicable).

A summary of the strategies, plans and programs required by PA SSD-5579 is provided in Table 5-2.

Table 5-2 - List of Strategies, Plans and Programs

Strategy / Plan / Program	Date Prepared / Revised	Approval Date
Environmental Management Strategy	September 2014	29 May 2015
Construction Environmental Management Plans Stage 1 REA Upgrade:	August 2015	17 August 2015
 Construction Noise Management Plan Construction Traffic Management 		

Strategy / Plan / Program	Date Prepared / Revised	Approval Date
Plan – Construction Erosion and Sediment		
Noise Management Plan	July 2014	15 September 2014
Air Quality Management Plan	July 2014	24 April 2015
Water Management Plan	August 2014	Pending Approval by the Director- General
Regional Biodiversity Strategy Neubeck Project, Springvale Mine Extension Project and Angus Place Colliery Extension Project	March 2014	-
Aboriginal Cultural Heritage Management Plan	March 2014	23 October 2014
Rehabilitation and Closure Management Plan	September 2014	14 October 2014
Pollution Incident Response Management Plan	December 2014	-

The status of WCS's performance during the audit, in respect of each condition of the DA, EPL, SoC and ML's is presented in **Appendix A**. Conditions considered to be not complied with, or not able to be verified, have been listed in Section 10 of this report.

Performance categories in respect of compliance are defined as follows.

Table 5-1 - Performance Category

Performance Category	Definition
Compliant	Currently in compliance. Sufficient verifiable evidence was available to demonstrate that the intent and all elements of the requirement of the regulatory instrument had been complied with within the scope of the audit.
Non-compliant	Currently not in compliance. Sufficient verifiable evidence was available to demonstrate that the intent of one or more specific elements of the regulatory instrument have not been complied with within the scope of the audit.
Administrative Non-compliance	A technical non-compliance with a condition of the consent 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 condition had not been met at all (e.g. noise management plan not prepared and submitted for approval).
Not Activated	Condition not applicable at time of audit or had not been triggered
Not Verified	It has not been possible to determine whether compliance exists. Sufficient verifiable evidence to demonstrate that the intent and all elements of the requirement of the regulatory instrument have been complied with within the scope of the audit was not available.
Not Assessed	the condition has not been assessed as part of the scope of this audit

Auditor's comments are provided next to each condition to explain evidence sighted relevant to each condition. Where considered relevant, observations have been made regarding specific compliance issues.

Conditions considered Non-compliant are presented in **Table 10-1** (Section 10) of this report. The table includes a discussion of the compliance status and recommendations for improvement where appropriate.

Where conditions were considered compliant; however it was considered a continuous improvement opportunity existed to improve the compliance status or to improve environmental performance at the site, a recommendation has been made in the compliance table. A summary of these recommendations is provided in **Table 10-2** (Section 10) of this report.

The auditors have not undertaken a rigorous or technical assessment of the documents required by the Development Consent or EPL, particularly where these documents have been signed off and/or approved by relevant regulatory authorities (for example, DP&E). A high level review of adequacy of some documents is provided in Section 6 of this report.

6 Review of Environmental Management System

This Section fulfils the requirement to assess the adequacy of strategies, plans or programs required under the Project Approval. The implementation of the management plans / programs is discussed in **Appendix A**.

6.1 Centennial Environmental Management Overview

Centennial Coal has established an Environmental Policy and Environmental Management System (EMS) Framework, as well as a number of Environment and Community Standards. The policy, EMS framework and associated procedure provide guidance to Centennial's sites, such as WCS, on the development of their own Environmental Management plans.

WCS has developed an Environmental Management Strategy and a number of supporting environmental management plans to manage environmental aspects and impacts of operational activities. WCS's Environmental Strategy (the Strategy) operates under the overarching Centennial Coal Environmental Policy and EMS Framework. Centennial's Environmental Management Framework is depicted in **Figure 6-1** below.





Centennial Coal has developed an Environmental Management System Framework Document (EMS Framework) incorporating the following four components:

- EMS Framework Document (Volume 1)
- EMS Procedures (Volume 2)
- Environment and Community Management Standards (Volume 3)
- Environment and Community Management Plans (Volume 4)

The Centennial EMS Framework has been developed to be consistent with the International Standard for Environmental Management Systems ISO 14001. The EMS Framework outlines the following elements:

- Commitment and policy;
- Identification of aspects and impacts;
- Legal and other requirements;
- Objectives and targets;
- Management plans;
- Responsibility for implementing the EMS;
- Training, awareness and competence;
- Communication;
- Documentation and document control;
- Operational control;
- Emergency preparedness and response;
- Measurement and evaluation; and
- Management review.

The EMS Framework is applicable to all activities and areas managed by Centennial. The purpose of the EMS Framework is to provide an effective management tool, which will foster sound environmental management of all EMS Framework that each Business Unit, such as WCS, develop an Environmental Management Strategy, consistent with the EMS Framework objectives.

The detail of the Centennial Coal EMS Framework and the site implementation of these documents were not assessed in detail during the audit.

WCS has adopted the following Centennial Coal Standards:

- Environmental Risk Assessment Protocol (ECMG 02)
- Environmental Incident Reporting (ECMG 03)
- Minimum Standards Newsletter (ECMS 05)
- Audit and Inspection (ECMG 06)
- Site Environment Induction Employees and Contractors (ECMS 09)
- Site Environment Induction Visitors (ECMS 10)
- Site Environment Induction New Staff (ECMS 11)
- Site Environment Induction New Mineworker (ECMS 12)
- Environmental Assessment Standard (ECMS 14)

WCS has developed an Environmental Management Strategy, an Environmental Management System and a number of environmental management plans and monitoring programs. These are discussed in more detail in Sections 6.2, 6.3 and 6.4 below. A review of the site's implementation of the above Standards and the Environmental Management System (EMS) was not included in the scope of this audit.

6.2 Environmental Management Strategy

The WCS Environmental Management Strategy (the 'Strategy') was prepared in February 2014 to satisfy the requirements of PA SSD-5579. The Strategy was submitted for approval by the Director-General on 2 October 2014. The Director-General approved the Strategy on 29 May 2015.

The Project Approval (Schedule 5, Condition 1 of PA SSD-5579) requires the following:

The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must:

- a) be submitted for approval to the Director-General within 6 months of the date of this approval;
- b) provide the strategic framework for the environmental management of the development;
- c) identify the statutory approvals that apply to the development;
- d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
- 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 development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - 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 Strategy provides the strategic and policy framework for the management of environmental issues at WCS, including defining key regulatory and other requirements. The Strategy also contains procedures applicable to CoA Schedule 5, Condition 1, including:

- Section 1.21 of the Strategy provided the strategic framework and included an overview of the Environmental System, Environmental Management Plans. The Strategy included, but was not limited to sections addressing implementation and operation, roles, responsibilities, training, communication, operational control and emergency preparedness and response. These topics generally provide the strategic framework for the environmental management of the site.
- Section 3 sets out the statutory requirements of the development in accordance with Condition 5.1(c).
- Section 5.1 sets out resources, roles, responsibilities, authority and accountabilities for environmental management of the Development.
- Section 5.3 described the process for managing community issues and information;
- Section 5.3.3 described how to manage complaints
- Section 5.3.3 described the dispute resolution process
- Section 6.4 addressed non-compliances and that these would be managed in accordance with the CIMOS 006 Incident Reporting Standard and Centennial's ECD
- Section 5.7 referenced the Pollution Incident Response Management Plan (PIRMP) as the principal document for managing environmental incidents.
- Appendix 2 included PA SSD-5579 and EPL's 3607 (Springvale Colliery) and 467 (Angus Place). No other plans or programs were included in the Strategy. Reference to plans required by SSD-5579 was made in Section 5.4.1 (p.23).
- Appendix 2 included Figures of environmental monitoring locations for dust, noise, surface water and groundwater. Section 6.2.2 addressed environmental monitoring.

6.3 Management Programs and Plans

The following documents were reviewed for adequacy by the auditors:

- Environmental Management Strategy.
- Water Management Plan.
- Noise Management Plan.
- Air Quality Management Plan.
- Aboriginal Cultural Heritage Management Plan
- Construction Environmental Management Plan (CEMP)
- Rehabilitation and Closure Management Plan.
- Pollution Incident Response Management Plan (PIRMP)

6.3.1 General Summary of Management Plan Adequacy Review

The following general comments are made regarding the adequacy of the management plans and monitoring programs:

- The use of Trigger Action Response Plans (TARPS) in the Water Management Plan and Rehabilitation and Closure Management Plan provide clear and concise instructions and actions for anticipated issues, such as EPL discharge exceedances or site groundwater monitoring.
- Document control was not always evident and had not been implemented in the majority of the plans making it difficult for the auditors to determine when plans had been, or were due to be updated.
- The structure of current plans and programs are not very user friendly. Several consultancies
 had written the plans resulting in inconsistent naming conventions of WCS areas and receiver
 locations as well as the general layout. The requirements and mitigation measures are often
 embedded or lost in text making the plans difficult to implement and audit. The usability of the
 plans and programs could be greatly enhanced by having a table listing required
 management/mitigation measures. This could then be the basis of site's internal and external
 audit/review process for implementation of the plans/programs.
- Roles and responsibilities were often included as the last section of the plans and were brief in nature. Typically roles and responsibilities would be stated within the first few sections of a management plan or against a specific monitoring or mitigation measure so it was clear to the reader from the beginning the individual responsible for a particular action.
- There is limited integration between the management plans, the Strategy and the Centennial EMS. The EMS, the Strategy and the management plans do not reinforce the link to one another, causing a lack of information in some respects or a double up of information in others. For example the Environmental Strategy is the only document that refers to the Centennial EMS and Standards while only the Air Quality Management Plan was the only document that appeared to reference the Strategy.

None of the management plans referred to the Strategy as the key environmental document for the Site or referenced it for roles and responsibilities for implementation. For example the current Noise Management Plan, Heritage Management Plan and Air Quality Management Plan do not note that any exceedances or incidents are to be entered in to the Centennial ECD Lotus Notes database. Only the Water Management Plan included Centennial Standards that referenced the ECD.

Overarching Recommendations Relating to Management Plans:

The following provides a summary of overarching recommendations relating to Management Plans in general at WCS. These recommendations vary in their level of risk and significance. Many continuous improvement recommendations are not at a level of risk or significance that warrant an immediate review of the Plan or update; however could be made during the next update of the Plan.
- REC-2016-02 That the structure of current management plans be improved so as to highlight
 management actions and mitigation measures that can be easily identified, implemented and
 audited against. This could include having a table or Section listing all of the management /
 mitigation measures required as part of the plan (similar to the TARPs in the Water
 Management and Rehabilitation and Closure Management Plans).
- **REC-2016-03** That WCS request third parties that write management plans use the MOP and EIS for consistency of naming conventions or site areas (i.e. Domains) as well as monitoring locations. WCS should also ensure that document control is included on internally and externally prepared management plans.
- **REC-2016-04** That roles and responsibilities for implementing monitoring and mitigation measures are stated within the early stages of the plans.
- **REC-2016-05** That integration between the EMS, the Strategy and the management plans is improved. Each plan should outline its strategic context in line with the WCS EMS, the Strategy and Centennial Coal's Standards.

It is noted that these comments are continuous improvement opportunities and would not be required to be completed immediately – it is suggested they are considered in the next scheduled update of the management plans.

The findings of the review of the adequacy of the management plans/monitoring programs and subsequent recommendations are provided in **Table 6-1**. It is noted many of the comments are made on the basis of identifying continuous improvement opportunities within the Plans.

Management Plan / Monitoring Program	Adequacy Review and Recommendations
Water Management Plan (2014)	Refer to Section 7.
Noise Management Plan (2014)	Refer to Section 8
Rehabilitation and Closure Management Plan (2014)	Refer to Section 9

Table 6-1 - Adequacy Review of Management Plans / Monitoring Programs

Management Plan / Monitoring Program	Adequacy Review and Recommendations
Air Quality Management Plan (2014)	The Air Quality Management Plan was prepared to address Condition 17, of Schedule 3 of the PA SSD-5579. The Plan was prepared by Pacific Environment Pty Ltd.
	The current monitoring network consists of a Tapered Element Oscillating Microbalance (TEOM) air quality monitor, High Volume Air Samplers (HVAS) and dust deposition gauges. The TEOM operates continuously, HVAS measure both PM_{10} and TSP on a 6-day cycle to coincide with monitoring carried out by the NSW EPA. Deposition gauges measure the amount of deposited insoluble solids on a monthly basis to determine an annual average.
	WCS monitor dust deposition at three dust deposition gauges. Each dust deposition gauge monitors insoluble soils and ash residue on a monthly basis. The location of the dust deposition gauges appeared to be suitable, with the exception of DG3 which is located adjacent to a former unsealed road. Dust from vehicle activity on the road was reported by WCS to have impacted the dust results on a number of occasions during the audit period; however, the road was reported to have been sealed during late 2015. There were no dust complaints received during the audit period.
	Use of the predictive and real-time monitoring as outlined in Section 8.1 was observed during the site inspection (Dust Risk Reports).
	Given the limited number of exceedances for TSP, PM ₁₀ and dust deposition and that WCS reported no dust related complaints were received during the audit period, it is considered the measures outlined in the Air Quality Management Plan to be generally effective and adequate.
	The Plan was written for the EIS and generally refers to proposed measures, such as the location of the TEOM.
	A Regional Air Quality Management Plan was submitted to DP&E in February 2016 after the audit period. This regional plan has not been considered in this audit.
	Recommendation
	• REC -2016-06 - Update the Air Quality Management Plan to reflect actual measures that are implemented rather than proposed. Also include the location of air monitoring equipment.

Management Plan / Monitoring Program	Adequacy Review and Recommendations		
Aboriginal Cultural Heritage Management Plan (2014)	The Centennial Regional Aboriginal Cultural Heritage Management Plan (ACHMP) dated 2014 was prepared to address Condition 31, Schedule 3 of PA SSD-5579. The Plan was prepared by RPS Australia Pty Ltd and was approved by the Director-General on 23 October 2014.		
	The plan was prepared to provide Centennial with a consistent approach concerning consultation with the local Aboriginal communities about Aboriginal cultural heritage identification as well as to identify consistent minimum standards and processes for Aboriginal cultural heritage identification, monitoring and management across Centennial's western operations. The ACHMP includes the following regional Centennial sites: Airly Mine; Angus Place Colliery; Clarence Colliery; Lidsdale Siding; Springvale Mine and WCS. The ACHMP outlines protocols for Aboriginal consultation, handling sensitive cultural information, roles and responsibilities, document control and dispute resolution.		
	The Plan includes the procedures to be followed for the identification, protection including monitoring) and management of environmental (Aboriginal cultural heritage) impacts during the normal operations of the WCS.		
	The plan identified that finds were 18 sites within the WCS. WCS management reported that no Aboriginal cultural sites were impacted during the audit period. One Aboriginal site located behind 'A' Pit was observed to be fenced during the site inspection.		
	No significant indigenous or non-indigenous heritage items were identified during the audit period.		
	Generally the regional ACHMP appeared adequate for the operations and activities at the WCS given these were occurring within a localised footprint.		
Construction Environmental Management Plans Stage 1	SSD-5579 does not specify the requirement to prepare a Construction Environmental Management Plan.		
KEA Opgrade (2013)	The Plan notes that there are no immediate plans to construct the haul road access road or complete the upgrades to the CHPP. Hence the Construction Environmental Management Plan only covers the construction of the Stage 1 of the Lamberts Gully REA upgrade. The overall plan only covers general environmental management, with separate documentation prepared relating to the engineering construction of the Stage 1 REA Upgrade. The following sub-plans were appended to the plan:		
	 Appendix 1 – Construction Air Quality Management Plan (SLR); 		
	 Appendix 2 – Construction Water Management Plan (SLR); 		
	 Appendix 3 – Construction Cultural Heritage Management Plan (SLR); 		
	 Appendix 4 – Construction Biodiversity Management Plan (SLR); 		
	 Appendix 5 – Construction Waste Management Plan (SLR); 		
	 Appendix 6 – Construction Noise Management Plan (Global Acoustics); and 		
	Appendix 7 – Construction Traffic Management Plan (SLR)		
	The Construction Noise Management Plan and the Construction Traffic Management Plan were prepared by Centennial and SLR Australia Pty Ltd respectively and were approved by the Director-General on 17 August 2015 as required by Condition 3 and Condition 35, Schedule 3 of SSD-5579 respectively.		
	The Plan was to be implemented in accordance with existing WCS policies, procedures, plans and monitoring requirements of EPL 3607.		
	Implementation of the plan was not assessed as Stage 1 of the REA had been completed at the time of the site inspection.		

Management Plan / Monitoring Program	Adequacy Review and Recommendations	
Pollution Incident Response Management Plan (2014)	The Pollution Incident Response Management Plan (PIRMP) updated in December 2014 and prepared in August 2012 was developed in response to a requirement by the <i>Protection of the Environment Legislation Amendment Act 2011</i> , now covered under section 153A of the POEO Act.	
	The PIRMP defines how external pollution reporting is to be undertaken in accordance with Centennial Coal's Management Standard-012 - External Environmental Reporting.	
	The Auditors undertook a high-level, summary assessment of adequacy against the content of the PIRMP, as outlined at <i>Clause 98C of the Protection of the Environment (General) Regulation 2009.</i> A high level of compliance was noted against the requirements identified in the Regulation.	
	The PIRMP was last tested in November 2015. The simulation concerned a discharge from a flocculent tank at the Co-Disposal Ponds into the clean water drain and into LDP-006. Records for the simulation were sighted dated 17 November 2015.	
	Generally the PIRMP appeared to meet the requirements of <i>Clause 98C of the Protection of the Environment (General) Regulation 2009.</i>	
	The following observations were made:	
	 Figures were not provided in the PIRMP to clearly show the location of potential pollutants on the premises as required by Condition 98C(1)(k) (i.e. as detailed in Table 2 of the PIRMP). 	
	Roles and responsibilities were not clearly defined.	
	Recommendations	
	 REC-2016-07 - Update the Plans / Figures appended to the PIRMP to clearly and legibly show the location of potential pollutants on the premises. Ensure the cross referencing of Figures correlates with those included in the PIRMP. 	
	• REC-2016-08 – Update the PIRMP to reflect roles and responsibilities.	

It is suggested that the recommendations provided in **Table 6-1** be addressed at the next scheduled review date for each of the management plans.

7 Water Management

7.1 Overview

WCS does not extract groundwater or utilise harvestable water rights for water supply. No water extraction licences are held for the site. Water is managed through the collection of dirty water run-off and reuse for processing purposes and by maximising water recycling facilities within the Washery. **Table 7-1** summarises water storage infrastructure at WCS.

Table 7-1 – Surface Water Storage Infrastructure

Primary	Treated and Recycled
 Rain interception. Run-off from undisturbed areas entering the lease area or in pit rainfall inflows. Run-off from rehabilitated areas. Municipal water supply (potable). 	 Site stormwater from disturbed and partly rehabilitated areas which enters the main pollution / sediment control ponds. Dewatering sump pumps at the base of the open cut area (currently not in use). Water generated from the washery reject disposal system. Water intercepted in DML and Cooks Dam from run-off from the old open cut areas and seepage from the old underground workings and open cut overburden.

Table 7-2 summarises the main surface water management infrastructure at the site as detailed in the Annual Review (Centennial, 2014, p.16).

Table 7-2 – Surface Water Storage Infrastructure

Dam / Pond Name	Function	Inflow	Outflow
DML Dam	Water Retention	Receives surface water runoff from surrounding catchment area (imminent Energy Australia ash emplacement and proposed LCC waste facility) and infiltration from ground water. Main inflow is via pumping of Cooks Dam water to minimise discharge through LDP- 006 from Cooks Dam.	Evaporation and seepage into Cooks Dam. In addition water can be pumped to Cooks Dam when required. There has been historic seepage into the Cooks Dam since the area was mined in the 1980's/90's. Since the volume of seepage into the Cooks Dam increased in 2013 there has been a requirement to pump water from Cooks Dam to the DML Dam.
Cooks Dam	Water Retention	Surface water runoff from upstream catchment areas, water is received from existing coal seam and old workings.	Water is pumped from the Cooks Dam to the washery tank and DML Dam. Cooks Dam overflows to Neubecks Creek via LDP-006.
Main Sediment Pond	Pollution Control	Surface runoff from upstream rehabilitation areas and upstream undisturbed Ben Bullen Forest catchment.	Water overflows via concrete spillway in times of extreme rainfall eventually flowing to LDP-006. During manageable rain events water is held, treated and released via pipe and valve to LDP-006.
Retention Dam	Final sediment control prior to discharging to LDP-006	Surface water runoff from upstream catchment areas.	Water overflows to the LDP-006.

Dam / Pond Name	Function	Inflow	Outflow
Stockpile Sediment Pond	Pollution Control	Surface run-off from coal stockpile area.	Water is transferred from the Stockpile Sediment Pond to the washery tank.
Washery Sediment Pond	Pollution control and Water Retention	Local surface runoff from Washery area, overflow from the Washery Clarifier.	The washery tank. A pipe directs discharge to Cooks Dam.
'A' Pit	Water Retention	Previously utilised for fines rejects storage, with the fines deposited as a slurry.	Water will be pumped to Cooks Dam via overground pipework.
		Now used for water retention. To decant water from the REA once the REA is operational.	
Kerosene Vale Dam	Pollution control and Water Retention	Collects surface water runoff from the Kerosene Vale stockpile area, with a drainage line directing water to a dam.	Water discharges from LDP-003 (Angus Place EPL 497) to Cox's River.

A number of existing dams and sediment basins are located across the north-east and south-east perimeter of the WCS site and provide storage for surface water run-off. The basins allow for the settling of suspended sediment prior to discharge at LDP-006 under Springvale Colliery EPL 3607. Surface water entering these containment basins is either run-off from undisturbed catchment areas off-site or from the partly rehabilitated open cut areas. Runoff from contaminated hardstand areas in the centre of the WCS is directed to primary sediment control basins, which is either recycled or treated within the existing water management system. Surface water discharge from the site is principally through LDP-006 located at the entrance to the site. LDP-006 is situated between the Retention Dam and Cooks Dam. Both of these main water storage report to LDP-006. A second licenced discharge point is LDP-007 located away from the main WCS surface operations at the transfer point of coal conveyors Ol-1 and OL-2. LDP-007 is a concrete sump and rarely discharges.

The DML and Cooks Dams are located in the backfilled void of an historic open cut mining operation of the Western Main Colliery. Prior to open pit mining, the area was subject to extensive underground bord and pillar mining within the Lithgow Seam. The subsequent open pit mining removed the remnants of the Lithgow Seam as well as the overlying Lidsdale and Irondale seams where present.

The Water Management Plan (RPS, 2014, p. 40) notes *"Water from disturbed and undisturbed areas that drain into Lamberts Gully, eventually drain into the Retention Dam where it overflows to LDP006. Overflows from Cooks Dam discharges to licensed discharge point at LDP006. The effect of this mixing of "clean" and "dirty" water has previously increased the sediment loading on the Retention Dam, and also unnecessarily increased the total volume of water that reaches LDP006. The discharge historically includes all the water from forested areas located upstream of the WCS site.*

A significant component of the discharge at LDP006 has been shown to result from overflow from Cooks Dam, which in turn is driven by inflows from the historical underground workings. The flow diagram includes the inflow contributions to Cooks Dam from the historical workings as well as the continuous pumping from Cooks Dam to DML dam at an average rate of 7.4 ML/d to maintain water storage on site and minimise discharge from Cooks Dam to LDP006.

The water balance modelling undertaken for the Surface Water Impact Assessment (RPS, 2013b) shows that the WCS site is exposed to significant discharge occurrences during high rainfall events. These result mostly from run-off arising from the large undisturbed forested areas upstream of the WCS site and draining to the Retention Dam. The simulated results also indicated that discharges at LDP006 are common and generally below 10 ML/day for more than 98% of the time. In the past year

(June 2013 to June 2014) the average daily discharge at LDP006 has been below 1 ML/day with a maximum recorded flow of 13.5 ML/day."

The Water Management Plan (RPS, 2014, pp.46-47) notes that "surface water on WCS site was generally found to be slightly brackish; however, the observed EC range of 58 to 4420 μ S/cm demonstrates a significant level of spatial and temporal variability. The median value for EC is shown to exceed the guideline value of 350 μ S/cm at all Wangcol Creek monitoring locations".

EC discharge at LDP006 is a known impact recognised in the WMP. The WMP and actions proposed to reduce salinity impacts is discussed further in following sections.

The EIS (RPS, 2013, p.71) notes that for 'standard operations' of discharging treated water "*Clean water runoff is proposed to be separated from undisturbed areas and a new discharge point attached to Cooks Dam. This dam will become the main water supply dam for the operation*" and that "*Surplus treated water will then discharge through a separate licence point*". Separation of clean water from dirty water has not occurred as was proposed in the EIS.

7.2 Site Observations

 Table 7-3 presents photographs of surface water management infrastructure and issues observed during the site inspection.

Table 7-3 - Site Inspection Photographs – Surface Water

Photo #	Comment	Photo
4-1.	LDP-003 at Kerosene Vale. LDP-003 is managed through the Angus Place EPL 467. WCS are not responsible for managing LDP- 003 or relevant infrastructure.	
4-2.	LDP-006 located adjacent to the main entrance to the site showing a sediment control structure at the outflow.	

Photo #	Comment	Photo
4-3.	Water level gauge and straw bale sediment control inside LDP-006.	
4-4.	LDP-007 located beneath OL-1 / OL-2 transfer point.	
4-5.	The automatic flocculation station at Kerosene Vale. WCS are responsible for the management and operation of the flocculation station before water reports to LDP-003.	
4-6.	The Main Sediment Dam that can be discharged through a valve and the internal drainage system to the Retention Dam and then LDP-006. The spillway from the Main Sediment Dam also flows to the Retention Dam.	

Photo #	Comment	Photo
4-7.	'A" Pit used to store decant water from the new REA. Water will initially be pumped and then eventually gravity fed into 'A' Pit. From 'A' Pit water will be pumped to Cooks Dam.	
4-8.	Two new installed water pumps at 'A' Pit. Water will be pumped from 'A' Pit to Cooks Dam.	
4-9.	A new spillway from 'A' Pit was being constructed at the time of the site inspection. This will flow to the catchment to the west of the overburden area.	
4-10.	Cooks Dam located adjacent to the main site entrance. Cooks Dam overspills via a concrete spillway to LDP-006.	

Photo #	Comment	Photo
4-11.	The spillway and sump from Cooks Dam that reports via a culvert to LDP-006.	
4-12.	The DML Dam located adjacent to Cooks Dam showing water being pumped into the dam from Cooks Dam. The DML Dam is the main water storage facility on-site.	
4-13.	The Washery Service Water Tank located on high ground above the CHPP. Water is pumped from Cooks Dam to this tank.	EFFECTIVE CAPA CITY S23 AL S23 C
4-14.	The Retention Pond located at the northern end of the site in the vicinity of LDP-006, Cooks Dam and the DML.	

Photo #	Comment	Photo
4-15.	A water pump located at the northern end of the Co-disposal Ponds.	
4-16.	Preparation for Stage 2 of the REA was underway at the time of the site inspection.	
4-17.	The Stockpile Sediment Dam located near to the CHPP. Water is pumped to the Washery Service Water Tank and overflow reports to the Retention Pond.	

7.2.1 Sediment and Erosion

Table 7- 4 presents photographs from the site inspection relating to erosion and sedimentation observed during the site inspection.

Photo #	Comment	Photo
4-18.	Evidence of erosion was observed around the footings of the OL-1 conveyors on the downward slope towards the haul road near Mt Piper power station. Wallerawang Landscaping Pty Ltd was observed to be grading the access track adjacent to OL-1 from Springvale Colliery.	
4-19.	Recently installed sediment and erosion controls (rock placed in drainage lines for stabilisation) at Kerosene Vale.	
4-20.	Sediment controls in the form of rock dams, and gabions were evident in the drainage channel to the north of the stockpile pad. The drainage channel reports via a flocking station (shown on the left) to LDP-003.	

Table 7-4 - Site Inspection Photographs – Erosion and Sedimentation

Photo Comment Photo # 4-21. Erosion was observed adjacent to OL-3 on the ridge prior to the OL-3 / OL-4 transfer point. The auditors observed that the slope was steep and that topsoil, including coal fines, had been washed down the hill towards the sump and the OL-3 / OL-4 transfer point noting that sediment had bypassed the sump. The slope facing the CHPP was observed to have been sealed with concrete to manage runoff and erosion on this side was observed to be limited; however, a number of the run-off drainage channels did not appear to be effective in diverting surface water run-off away from the conveyor. 4-22. Sediment controls were observed below the OL-3 / OL-4 transfer point to capture sediment that is not collected in the sump at the OL-3 / OL-4 transfer point. 4-23. Coal fines were observed at the boundary fence to the Mount Piper Power Station below the OL-3 / OL-4 transfer point. Site management reported that this was an historic issue that occurred prior to the audit period. Sediment controls in the form of rock check dams were observed above this point to capture sediment run-off from the OL-3 / OL-4 transfer point.

4-24. A surface water drain adjacent to an internal road showing evidence of coal fines.



Photo #	Comment	Photo
4-25	A Bobcat® with a customised attachment	

4-25.

A Bobcat® with a customised attachment that is used to clear coal from beneath the overland conveyors.



4-26. Kerosene Vale Stockpile Pad

No ROM coal was stockpiled on the pad (approximately 3.5 hectares) at the time of the site inspection and WCS management reported that none had been stored on the site during the audit period. There was evidence of minor gullying from the centre of the pad towards the edges and sediment controls in the form of rock dams, and gabions were evident in the drainage channel to the north of the pad. The drainage channel reports via a flocking station to LDP-003.



4-27. Kerosene Vale – Drainage Channel

Sediment controls in the form of rock dams, and gabions were evident in the drainage channel to the north of the stockpile pad. The drainage channel reports via a flocculation station to LDP-003.



7.2.2 Reject Emplacement Areas

The former REA for the WCS known as "A Pit" is located to the south of the overland conveyor to Mount Piper Power Station. It lies over a portion of the former Lamberts Gully Open Cut Mine and incorporates the existing approved REA and its extension to the east. The new REA extension is being developed progressively and rehabilitation activities of the wall of the REA will be delayed until such time as final external benches from subsequent stages are completed. Stage 1 of the REA extension was observed during the site inspection with Stage 2 due to commence soon after the audit site inspection. Pumping to the Co-Disposal ponds was likely to cease allowing for partial rehabilitation of the Co-Disposal Ponds.

Photo #	Comment	Photo
4-28.	Stage 1 of the new REA was awaiting formal sign-off prior to use at the time of the site inspection. Preparation of Stage 2 was observed to have started at the time of the site inspection.	
4-29.	Preparation of the Stage 2 REA area was underway at the time of the site inspection.	
4-30.	A Pit (a former open cut void) was used as a REA but will be used a decant pond for the new REA.	
4-31.	Disposal of tailings to the Co-Disposal Ponds were was due to cease shortly after the site inspection with tailings being diverted to the new REA (Stage 1). Once pumping ceases this area would be available for partial covering and rehabilitation work that may require an additional capping layer.	Co-DISPOSAL POND 3

Table 7-5 - Site Inspection Photographs –REAs

Photo #	Comment	Photo
4-32.	Tailings being disposed to Co-Disposal Pond 3 during the site inspection. Tailings were planned to be redirected to the A Pit very shortly after the site inspection.	

7.3 Water Management Plan

The current Water Management Plan (WMP, 2014) was prepared to address Conditions 24, of Schedule 3 of the PA SSD-5579. The WMP includes a Site Water Balance, Surface Water Management Plan and Groundwater Management Plan, as required by the Condition 24. The WMP was issued to DPE, however was not approved at the time of the site inspection for the audit.

The WMP was prepared by RPS Australia Pty Ltd based on the EIS that assumed a second washery and haul road link would be constructed at the WCS. WCS management reported that construction of both the second washery and the haul road link was very unlikely to proceed. Given this, the planned usage of water from the second washery will not occur which will affect the water balance on site resulting in more water that requires treatment and discharge. Therefore, the assumptions that the plan was based on are now not current and some aspects of the plan relate to an operational situation that wont exist. WCS also reported that, following some investigations by consultants, the separation of clean and dirty water catchments need to be reconsidered as they may not be feasible.

WCS stated that given the above, a revised WMP, including Site Water Balance, Surface Water Management Plan and Groundwater Management Plan was in the process of being prepared by GHD to reflect the operation of the site without the previously planned infrastructure. This revised WMP is to be submitted to DPE for approval. The scope of works to be completed by GHD was not sighted by auditors.

Given that WCS plan to review and update the entire WMP, a review of the document has not been undertaken as part of this audit. However, some comments are made as follows:

- The inclusion of LDP-006 criteria on the Springvale Colliery EPL 3607 and LDP-003 on the Angus Place Colliery EPL 467 is confusing and it is not clear which conditions are specific to WCS operations.
- The water quality monitoring in the WMP does not include an assessment of the impacts of discharge from the mine on biota in Neubecks (Wangcol) Creek.

7.4 Implementation of the Water Management Plan

An assessment of the implementation of the WMP is provided in Appendix A for Schedule 3; Condition 24. An assessment of WCS performance in meeting the performance criteria for water as set out in the Development Consent is provided in Appendix A for Schedule 3; Condition 23.

Sediment and erosion controls as described in the WMP were observed across the WCS and were generally aligned with the Key Management Principles defined in Section 6.3.1 of the WMP. For example, water draining from disturbed areas, including water draining from surfaces containing coal and from shared catchments draining from disturbed surfaces outside the property was generally directed towards pollution control ponds.

Water quality monitoring as defined by the WMP was generally being undertaken and is assessed in Appendix A (EPL Condition P1.3 and M1.1).

Section 11.3.3 of the WMP defines measures proposed to manage EC exceedences at LDP-006. The measures observed to be implemented at LDP-006 the time of the site inspection were generally consistent with the WMP as noted below:

- The diversion of water to the eastern clean water drainage that drains the Lamberts Gully
 catchment was likely to improve the discharged water quality at LDP-006 and reduce run-off
 infiltration contributing to the Cooks Dam inflows. However, the update of the WMP by GHD
 will provide a more accurate account of inflows and outflows and potential mitigation
 measures as well as clarification concerning sources of high EC at WCS.
- Annual reassessment of the Wangcol (Neubecks) Creek Far Downstream SSTV and the LDP006 discharge limits using latest data as per ANZECC (2000) recommendations regarding the establishment of SSTVs had not occurred as EPA had not agreed on SSTV limits at the time of the site inspection.
- Continuation of pumping water to DML Dam rather than overflow to LDP-006 was occurring at the time of the site inspection.
- Maintaining freeboard capacity in the Retention Dam and sediment ponds to capture low EC runoff and discharge to LDP-006 over longer time period to dilute EC was generally occurring at the time of the site inspection.
- Identification of sources of high EC input to LDP-006 was reported by WCS to be part of the scope of the revised WMP being conducted by GHD.
- Installation of a low flow sump above LDP-006 to pump high EC water to Cooks Dam had occurred at the time of the site inspection.
- Installation of a sump at Cooks Dam spillway to recover high EC groundwater and pump to Cooks Dam had occurred at the time of the site inspection.
- Improving the separation of clean and dirty water (to include high EC water) runoff and continue to selectively use the dirty water for reuse in the Washery was ongoing at the time of the site inspection.

The Plan notes that clean water from undisturbed areas upstream will be progressively separated by controlled drainage and water diversions and then discharged to Wangcol Creek via the Retention Dam and LDP-006. It was observed that controlled discharges from the disturbed water system had not been reduced and an overall decrease in surface water flow (as a result of emplacement development, progressive void infilling and rehabilitation across the disturbed areas of the WCS site) had not occurred at the time of the site inspection.

Evidence of de-silting of the site dams was provided comprising of work order records sighted through the site's accounting system.

It is noted that a water quality specialist was not included with the audit team and a full assessment of the adequacy of these elements has not been performed as part of this audit.

7.5 Compliance Assessment

A detailed compliance assessment that relates to water management for the Development Consent, EPL and Mining Leases is provided in Appendix A. Conditions considered non-compliant and relevant recommendations are discussed in Section 10. The EPL 3607 defines criteria for LDP-006 for Oil and Grease; pH; TSS; and Turbidity. For the audit period WCS were found to be compliant with these criteria, except for two pH criteria exceedances. One exceedance occurred on 8 December 2014 and the other exceedance on 12 December 2014. Both events occurred following less than 56 mm of rainfall (EPL 3607 Condition L2.5 rainfall criteria).

LDP-006 is the only discharge point on the main WCS site and data collected at this location represents the only water discharges to the environment from the WCS site. The site uses EPL 3607 criteria, Australian Guidelines for Water Quality Monitoring and Reporting (2000) and statistical analysis of baseline data when setting and monitoring water quality trigger levels.

Assessment of Potential Impacts of Pollutants at LDP-006

Under a former pollution study requirement of the Springvale EPL, Condition U3: Assessment of Potential Impacts of Pollutants at LDP-006 WCS was required to monitor LDP-006 (by sampling and obtaining results by laboratory analysis) the concentration of a range of pollutants specified in the Condition. WCS was also required to monitor for the specified pollutants at the upstream and downstream locations within Neubecks Creek.

A note to the condition stated "It is the EPA's intention to place water quality limits for these pollutants on all discharges via LDP6 based on the results of this assessment."

Following the collection of additional monitoring results up until 31 December 2013 WCS had to undertake an assessment of the pollutants detected in water discharged from the site via LDP6 in accordance with ANZECC water quality guidelines and provide the assessment to the EPA by 28 February 2014. GHD (GHD, 2014), completed a report titled 'Neubecks Creek ANZECC and ARMCANZ 2000 Assessment Environment Protection Licence Report' which was issued to the EPA to address Condition U3.

A report was completed with water quality monitoring results provided over the monitoring period for the requested analytes comprising Conductivity, Dissolved iron, Dissolved manganese, Dissolved nickel, Total nickel, Total hardness, Dissolved zinc and Total zinc.

The report also generated Site Specific Trigger Values (SSTVs) and proposed Discharge Limits for Conductivity, Dissolved iron, Dissolved manganese, Dissolved nickel, hardness, and Dissolved zinc. SSTVs and proposed discharge limits were included in the sites Water Management Plan (RPS 2014).

The above program (Condition U3) was removed from EPL 3607 in the 10 December 2014 EPL variation. The EPA did not place water quality limits in the EPL for these pollutants on discharges via LDP6 following this assessment (to the date of the audit). It is noted that the EPA has made variations to other licenced discharge points on EPL 3607 (related to Springvale Colliery discharges), and have ongoing discretion to provide limits for the pollutants at LDP6 in the future. Appendix A provides further detailed assessment of compliance with the EPL.

Site Specific Trigger Values (SSTV) for Electrical Conductivity and other analytes

The Electrical Conductivity (EC) Site Specific Trigger Value (SSTV) for LDP-006 as stated in Table 11.1 of the Water Management Plan is 3,693 μ S/cm. Monthly EC data reviewed for the period 1 April 2014 through to 5 February 2016 identified that there were 8 monthly EC exceedances of the Water Management Plan EC SSTV.

The Water Management Plan also provides SSTV's for Hardness (mg/L), Iron (dissolved, mg/L), Manganese (dissolved, mg/L), Nickel (dissolved, mg/L) and Zinc (mg/L). RPS (2014, p.58) noted that "It is not considered beneficial to assign trigger values to any other surface water monitoring taking place onsite as this water is being contained within the on-site surface water storage facilities and can be discharged via LDP006". SSTVs were exceeded for Hardness on eight occasions in November and December 2014, and in November and December 2015. WCS management reported that SSTV's are yet to be approved as the Water Management Plan has yet to be approved by the Director-General.

Salinity in discharge waters is understood to be a regional issue for Centennial Coal and that Centennial are considering regional approaches to the management of these discharges with direction being provided by the EPA through the enforcement of EPLs at other Centennial sites. The management of salinity issues at WCS is therefore part of a broader context to reduce saline discharges in the region and are likely to be directed by agency responses to the issue.

Seepage on Castlereagh Highway

In May 2013, seepage was identified along the southern side of Castlereagh Highway adjacent to the DML Dam at the Western Coal Services site. It is understood that waterlogged ground and ponded water were observed, along with a white precipitate. GHD Pty Ltd (GHD) were commissioned to investigate measures to mitigate potential environmental and visual impacts of the seepage. A draft report dated February 2015 (Seepage Mitigation Options Feb 2015) was prepared with the *purpose "review and summarise the outcomes of previous investigations into the seepage and identify and assess mitigation options.*"

The draft report summarised the impacts as follows:

"Based on the lines of evidence from the assessment of water quality and water levels, it is considered most likely that the seepage observed along the Castlereagh Highway is the result of rising underground water levels over recent years, which has also resulted in rising water levels within the DML Dam and Cooks Dam. The seepage is a similar water type to Cooks Dam, LDP006 and groundwater in the vicinity of the seepage area."

The draft GHD report provided a number of options to address the seepage along with various recommendations. WCS indicated that GHD were in the process of finalising the report and management options assessments in consultation with WCS.

7.6 Aquatic Ecology Monitoring – Wangcol Creek

Marine Pollution Research (MPR) has been commissioned by Centennial to undertake biannual aquatic ecology monitoring of catchments from WCS, Angus Place and Springvale and Lidsdale Siding. The aims of the aquatic ecology monitoring programs are to develop an understanding of the aquatic environment of the receiving water into which LDP6 discharges, and potential effects of the discharge water on the aquatic ecology within the receiving waters. To date there have been ten biannual aquatic ecology monitoring survey reports for Springvale Coal in the Wangcol Creek study area between Autumn 2010 and Autumn 2015. Only the latest report was reviewed for this audit.

Sample sites are shown in Figure 7-1 below. Specific findings related to Wangcol Creek included:

- All Wangcol Creek sites with the exception of downstream monitoring site WC3 recorded pH values within the ANZECC (2000) default trigger range for slightly disturbed upland rivers of 6.5 to 8.0 pH units.
- Mean conductivity levels in Wangcol Creek ranged from 442us/cm Upstream (WCup) to 1513 us/cm at WC2.
- Maximum conductivity levels for WCup and WC2 were 528 and 2657 us/cm respectively.
- The individual site macroinvertebrate taxa diversity ranged between 14 taxa at WC2 and 25 taxa at CR2, with a survey mean (± SD) of 20.2 ± 3.0 taxa per site recorded over all ten of the Western Coal Services licensed discharge monitoring sites.



Figure 7-1 - Centennial West Aquatic Ecology Sampling Sites Spring 2015

Source Figure 3: Centennial West Aquatic Ecology Sampling Sites Spring 2015, Western Coal Services Aq Ecol Sp 15 Ver 2, Marine Pollution Research Pty Ltd

7.7 Recommendations

Various recommendations were made relating to compliance with water management conditions as detailed in Appendix A and Section 10. The following additional recommendations are made concerning surface water management from the discussion above:

REC-2016-09 - Sediment and erosion controls should be improved in accordance with the Managing urban stormwater: soils and construction (Landcom, 2004) on the OL-3 ridge to minimise the potential for undermining of OL-3 footings and to better control surface water run-off towards the OL-3 / OL-4 transfer point (Refer to Photo 4-21).

REC-2016-10 - Until a longer term plan for the use of the Kerosene Vale stockpile area is agreed (within Centennial and/or with DRE) sediment and erosion controls should be installed on the exposed stockpile pad to stabilise the area and reduce the sediment load at the flocculation station and LDP-003.

REC-2016-11 – That the Water Management Plan be fully reviewed and updated as was reported by WCS to be occurring. The revised Water Management Plan should review and include mitigation measures for groundwater seepage into Cook and DML dams.

REC-2016-12 – The revised Water Management Plan should provide a broader context for the management of saline discharges in the region and provide specific guidance to WCS for discharges at LDP-006.

REC -2016-13 – The management of the seepage on Castlereagh Highway should be addressed including finalising the draft GHD report; and implementing the GHD recommendations and agreed options.

REC-2016-14 – Consideration should be given to the long term management of water discharging from LDP-006, including post closure.

REC-2016-15 – The monitoring of discharges at LDP-006 should include eco-toxicology to assess the impacts of the site discharge on biota in Neubecks (Wangcol) Creek.

Refer to REC -2016-01 (Section 5.1.1 – Environmental Protection Licences).

8 Noise

8.1 Overview

Noise management is outlined in the Noise Management Plan for WCS (Condition 9, Schedule 3 of PA SSD-5579). Key noise sources at WCS include:

- Conveyors to transport coal between Springvale, Lidsdale, WCS and Mt Piper Power Station;
- Haul roads (when operational); and
- Plant and equipment operating at the WCS, including the CHPP and external plant such as dozers.

The EIS (RPS, 2013, p.ix) stated that:

- "Modelled predictions indicate that the Project will comply with the Industrial Noise Policy (INP) Project Specific Criteria in the locality of Lidsdale, Wolgan Road and Springvale.
- Modelled predictions indicate that the Project will comply with short term noise goals of the draft conditions of consent for the Lidsdale Siding Project (MP 08_0223).
- Modelled predictions indicate that there will be likely residual noise impacts above the INP Project Specific Criteria at some receptors at the main residential area of Blackmans Flat.
- Sleep disturbance modelling indicates that maximum noise levels generated by the Project will comply with sleep disturbance goals at the closest, potentially most affected receptors in Wallerawang, Lidsdale and Springvale. Predicted maximum noise levels from the Project at the main residential area of Blackmans Flat and Wolgan Road receptors show potential exceedance of the noise goals but are below a level that is considered to cause awakening reactions.
- During the night period the modelling indicates the cumulative amenity noise level exceeds the acceptable level of 40 dBA at Blackmans Flat (Locations B2 and B17), refer to Figure 23 of EIS for these locations, but remains below the maximum noise level of 45 dBA.
- With the exception of some residential lots at Blackmans Flat (B2, B4 B5 and B6), refer to Figure 23 of this EIS, modelled predictions for the construction phase of the Project indicate that noise emission from construction will comply with the noise affected management level. However, the predicted construction noise levels are below the highly noise affected level for the scenarios considered.
- Predicted vibration levels for the construction and operation of the Project are significantly below damage and annoyance risk criteria at all times".

WCS conduct attended (day, evening and night time noise) and continuous unattended noise monitoring. Between July 2014 and December 2015, 71 exceedances were recorded against SSD-5579 noise criteria (Condition 7, Schedule 3). Exceedances of noise criteria were also noted on 12 and 13 January 2016 detailed in a letter from WCS to DP&E (Centennial, 2016).

Centennial wrote to the DP&E on 11 November 2015 and provided an update concerning noise management at WCS as well as providing a regional context to noise issues. The letter noted that Centennial:

- Had installed and commissioned a noise compass in the Lidsdale area.
- Would update the Noise Impact Assessment for the WCS and that an application to modify the WCS Project Approval will be submitted during 2016.
- Planned to commission a study supporting the identification of on-site mitigation measures by 30 December 2015.
- Acknowledged that DP&E had requested monthly noise compliance reporting but noted that it
 was in the process of developing a regional noise monitoring program as Centennial intends
 to rationalise it's monitoring program across the Lidsdale/Wallerawang region. The regional
 plan would address noise and management requirements for the WCS site. The Centennial
 letter indicated that the regional plan was due for submission prior to 21 February 2016.

WCS engaged a noise consultant to conduct a noise assessment for conveyor OL-1 and the transfer point for OL-1 / OL-2 (Hatch, 2016) to further understand the issues and sound levels from the sources of noise. WCS and Centennial were considering the strategies provided in the report (Hatch, 2016) at the time of the site inspection in early February 2016. WCS reported on 15 March 2016 that revised noise modelling had just been received at this time and would support further investigations into appropriate noise controls.

A Draft Regional Noise Management Plan that covers WCS as well as other regional Centennial Coal sites was issued to DP&E by Centennial Coal on 11 February 2016.

8.2 Site Observations

Table 8-1 provides site observations of the main noise management infrastructure and management measures at the site.

Table 8-1 - Site Inspection Photographs – Noise

Photo #	Comment	Photo
5-1.	OL-1 looking from Springvale Colliery towards the WCS. The conveyor was observed to be enclosed on one side and the roof to mitigate noise impacts.	
5-2.	Conveyor OL-2 looking towards the closed Wallerawang Power Station.	

Photo #	Comment	Photo
5-3.	The transfer point between OL-1 and the Wallerawang Power Station conveyor. The Wallerawang Power Station conveyor was not operating at the time of the site inspection.	
5-4.	A noise attenuation wall for OL-1 facing Wallerawang Power Station and a service station.	
5-5.	A noise attenuation wall for OL-2 screening receiver B17.	

8.3 Noise Management Plan

The Noise Management Plan (NMP) in place during the audit period was prepared to address Condition 9, of Schedule 3 of the PA SSD-5579 and was prepared by SLR Australia Pty Ltd. The NMP was considered in the compliance assessment (Appendix A Schedule 3 Condition 9).

At the time of the site inspection, Centennial was in the process of developing a regional noise monitoring program as it intended to implement a more consistent approach to its monitoring program across the Lidsdale/Wallerawang region. The regional plan was to address noise and management requirements for the WCS site.

Following the site inspection and outside of the audit period, a Draft Regional Noise Management Plan that covers WCS as well as other regional Centennial Coal sites was issued to DP&E by Centennial

Coal on 11 February 2016. Given this is a Draft document and under review by agencies, the plan has not been reviewed as part of this audit. When the regional plan is approved the WCS NMP will be superseded.

Given the planned introduction of the regional Noise Management Plan, an adequacy review of the pre-existing Noise Management Plan was not undertaken. Due to the regular exceedances, the engagement of a noise specialist to review the overland conveyors and the wider Centennial regional noise management program it is considered that the NMP in place at the time of the site inspections (3 and 4th February 2016) required improvement to better address the management of noise related operations and activities at WCS. Specifically, noise mitigation measures to reduce noise at receivers was required.

It is noted that a noise specialist was not included with the audit team and a full assessment of the adequacy of these elements has not been performed as part of this audit.

8.4 Compliance Assessment

The WCS Exceedance Records spread sheet identified three evening and night-time LAeq, 15min dB noise criteria exceedances for 2016 on 12 and 13 January 2016. The 2015 Annual Noise Monitoring Report prepared by Global Acoustics Pty Ltd identified the following evening and night-time LAeq, 15min dB noise criteria exceedances for 2015:

- January Two plus one noise complaint
- February Four plus one noise complaint
- March Six plus two noise complaints
- April Seven
- May Three
- June Seven
- July One
- November Two
- December Four

For the majority of the 2015 noise exceedances Global Acoustics (pp.42-45) noted that the overland conveyor was the noise source.

The 2014 Monthly Noise Monitoring Reports prepared by Global Acoustics Pty Ltd identified the following evening and night-time LAeq, 15min dB noise criteria exceedances for 2014:

- July Six
- August One
- September Six
- October Ten
- November Six
- December Six

In summary, there were 71 exceedances against PA SSD-5579 criteria between July 2014 and December 2015 that principally related to conveyor associated noise. Four noise complaints were received between 30 July 2014 and 2 December 2015.

A letter from WCS to DP&E dated 23 April 2015 noted that due to Angus Place Colliery being placed in care and maintenance, the last coal truck to use the Wallerawang and Mount Piper haul roads was on 6 March 2015. Therefore until Angus Place Colliery is taken out of care and maintenance it is expected that there will be no impact to residential receivers at nearby receivers (locations NM1, NM2, NM3, NM4 and NM5).

It is noted that the Wallerawang Power Station, a potential noise source in the area of OI-1 and OL-2 ceased operations in March 2014 (i.e. after the WCS EIS was prepared). The result of this has been

to reduce background noise levels, and hence increase the proportional noise impacts from WCS infrastructure.

Based on the continued noise exceedances WCS engaged a noise specialist to conduct a noise assessment for conveyor OL-1 (overland one conveyor between Springvale and Wallerawang Power Station) and the transfer point for OL-1 / OL-2 (Hatch, 2016) to further understand the issues and sound levels from these sources of noise. WCS and Centennial were considering the strategies provided in the report (Hatch, 2016) at the time of the site inspection. WCS reported on 15 March 2016 that noise modelling had been received which would allow further assessment of the most effective noise treatment options to inform decisions on treatments to be implemented.

8.5 Recommendations

The following recommendations are made concerning noise management:

REC-2016-16 – The review, consideration and implementation of strategies to manage and mitigate the continued noise exceedances from the development should be expedited.

REC-2016-17 – Implementation of Centennial's Regional Noise Monitoring Plan should be expedited.

REC-2016-18 - At the next revision of the Noise Management Plan include the specific noise mitigation measures that apply to the WCS as developed from specialist reports to develop appropriate mitigation measures (subject to implementation of the regional Centennial Noise Monitoring Plan).

9 Rehabilitation

9.1 Overview

There is a variety of stages of rehabilitation at WCS given the current coal handling activities on and around historical open cut mining and waste rock dumps and emplacement areas. The MOP³ (Centennial, 2015, pp.61-65) allocates areas of the site into various Domains each to have a specific approach to rehabilitation.

The area to the north of the overland conveyor will be used by Delta Electricity for ash emplacement. An area of approximately 29 ha is set aside within the WCS as a potential waste emplacement area for LCC. Final rehabilitation of this area is the responsibility of LCC.

The MOP (Centennial, 2015) identifies the following Primary Domains:

- Domain 1 Washery and Coal Handling: this area includes the existing and proposed coal processing area, coal stockpiles, associated conveyors, access roads and storm water dams.
- Domain 2 REA: this area incorporates both the existing approved REA and the proposed expanded REA.
- Domain 3 Co-Disposal REA: this incorporates the old tailings dams and retention dam.
- Domain 4 Cooks and DML dams and other water management structures;
- Domain 5 Previous rehabilitation work and offsets associated with the Lamberts Gully Open Cut Mine.
- Domain 6 Kerosene Vale Site (Coal stockpile area, rehabilitation area, water management, stockpile stowage material and sealed underground entries).
- Domain 7 Haul roads (Centennial owned) and conveyors.
- Domain 8 Energy Australia Ash Emplacement Area. Management of this area is the responsibility of Energy Australia.
- Domain 9 Lithgow City Council Waste Emplacement. Management of this area is the responsibility of Lithgow City Council.

Secondary Domains were allocated in the MOP as follows:

- Rehabilitation Woodland to be seeded with a woodland mix including the REA, Co-Disposal REA, existing rehabilitation areas, pit top and Kerosene Vale.
- Rehabilitation Pasture rehabilitation will be used in rehabilitating haul road batters and any disturbed areas in the conveyor corridor.
- Ash Emplacement from nearby power stations There are areas of the site owned by Energy Australia which will be used for future ash emplacement. These areas are located within the Development Consent Area, but it are the responsibility of Energy Australia to manage and rehabilitate.
- Industrial Land use This includes the continuing use of existing private haul roads for access following closure of Western Coal Services.
- Water Management The existing water management system will remain at closure.
- Energy Australia Ash Emplacement Area Energy Australia Ash Emplacement Area. Management of this area is the responsibility of Energy Australia.
- Lithgow City Council Waste Emplacement Lithgow City Council Waste Emplacement. Management of this area is the responsibility of Lithgow City Council.

³ Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022

It was noted that there was an inconsistency in the naming convention of areas of the site in the MOP, EIS and management plans. The MOP referred to Domains whereas the EIS referred to historical names. The following figures from the MOP show WCS rehabilitation areas.

Figure 9-1 presents an overview of the rehabilitation areas at WCS. Figure 9-2 presents the proposed rehabilitation program at year five. Figure 9-3 presents the rehabilitation areas at Kerosene Vale. Photographs concerning rehabilitation from the site inspection are presented in Table 9-1 and Table 9-2.



Figure 9-1 – Overview of WCS Rehabilitation Areas

(Source: RPS, 2013⁴, Figure 9, p.35)

⁴ RPS Australia East Pty Ltd, 2013, Environmental Impact Statement Western Coal Services Project, 29 July 2013, Ref: PR110910



Figure 9-2 – Rehabilitation Program Year 5

(Source: RPS, 2013⁵, Figure 12, p.44)

⁵ RPS Australia East Pty Ltd, 2013, Environmental Impact Statement Western Coal Services Project, 29 July 2013, Ref: PR110910



Figure 9-3 – Rehabilitation Areas at Kerosene Vale

(Source: RPS, 2013⁶, Figure 10, p.41)

⁶ RPS Australia East Pty Ltd, 2013, Environmental Impact Statement Western Coal Services Project, 29 July 2013, Ref: PR110910

9.2 Site Observations

Table 9-1 presents rehabilitation and management measures at WCS at the time of the site inspection.

Table 9-1 - Site Inspection Photographs – Rehabilitation WCS

Photo #	Comment	Photo
6-1.	Drainage Channel near approved REA	and the second
	Evidence of progressive rehabilitation in a recently constructed clean water channel was observed adjacent to the reject emplacement area.	
6-2.	Pumping Station at A Pit	
	Progressive rehabilitation was observed at the recently constructed 'A' Pit pump station.	
6-3.	Rehabilitation Initiative Area The Rehabilitation Initiative Area showing new saplings planted during the audit period.	

Photo #	Comment	Photo
6-4.	Rehabilitation Initiative Area The Rehabilitation Initiative Area showing a new sapling planted during the audit period.	
6-5.	Rehabilitation Initiative Area	
6-6.	Rehabilitation Initiative Area Offset area to the south of Stockpile Sediment Pond.	
6-7.	Southern Rehabilitation Area – subject to maintenance Rehabilitation was observed to be progressing well in the rehabilitation area to the south of the WCS site. It was notable that limited weeds were present in the areas inspected within the historical rehabilitation areas.	

Photo #	Comment	Photo
6-8.	Rehabilitation Area – subject to maintenance	
	Understory development in this area was limited due to poor topsoil covering.	

6-9. Rehabilitation Area – subject to maintenance

Understory development varied across the rehabilitated areas with some areas having less understorey.



6-10. Rehabilitation Area – subject to maintenance

Evidence of progressive rehabilitation at a recently constructed dirty water channel was observed adjacent to the new reject emplacement area (REA).



6-11. Rehabilitation Area – subject to maintenance

Stripped topsoil and trees from clearance of the new REA were observed.





The MOP (Centennial, 2015, p.65) note that the three drifts and air shaft/fan house at Kerosene Vale will be decommissioned at the end of the MOP period (i.e. November 2022).

Table 9-2 - Site Inspection Photographs – Kerosene Vale

Photo #	Comment	Photo
6-13.	Kerosene Vale The redundant air shaft/fan house at Kerosene Vale. Access to an internal room of the building was possible at the time of the site inspection. It is noted the new gates had been installed across the entrance to Kerosene Vale.	FE
6-14.	Kerosene Vale The redundant air shaft/fan house at Kerosene Vale.	



Future IEAs should focus on the progress of rehabilitation at the WCS against the November 2015 to October 2022 MOP.

9.3 Rehabilitation and Closure Management Plan and MOP

The Rehabilitation and Closure Management Plan dated 2014 was prepared to address Condition 45, Schedule 3 of PA SSD-5579 and was prepared by SLR Australia Pty Ltd. The plan was approved by the Director-General on 14 October, 2014, who noted that "*the R&CP is considered to be satisfactory taking into account the relatively short term approval period which is covered*". DRE also noted that the "*Rehabilitation and Closure Management Plan is an addendum to the Springvale Colliery Mining Operations Plan (MOP) which was initially approved by DRE on 24 May 2010 and which expires in 20 November 2016*". DRE required that a new MOP for WCS be prepared and submitted to DRE no later than 30 September 2016.

The 2015 / 2022 MOP approval letter from DRE on 23 December 2015 noted that the Rehabilitation and Closure Plan ceases to have effect on the date of the MOP approval (i.e. 23 December 2015). DRE also required that WCS submit an updated Rehabilitation Cost Estimate by 31 March 2016.

A Rehabilitation Cost Estimate was provided for on 18 March 2016. This was provided after the audit period and was not assessed or reviewed as part of this audit.

The actions and mitigation measures described in the Rehabilitation and Closure Management Plan appeared to have been included and expanded upon in the Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022.

Established rehabilitation in Domain 5 was observed to be in good condition with limited weed infestation at the time of the site inspection. Topsoil coverage appeared to be limited and material and soil characterisation of topsoil and subsoil to be used in rehabilitation in the Domains is encouraged prior to rehabilitation to ensure successful revegetation.

Rehabilitation of the Kerosene Vale site had not commenced during the audit period.

A compliance review of the 2015 / 2022 MOP is provided in the compliance register for CCL733, Condition 3, Appendix A.

9.4 Compliance Assessment

Compliance with rehabilitation requirements is considered in Appendix A for the Development Consent Schedule 3 Conditions 26; 27, 28, 30, 43, 44 and 45. WCS were generally compliant with most rehabilitation related conditions noting that the conditions in the approval were relatively recent.

WCS management reported that no final rehabilitation was undertaken during the audit period. Development Consent SSD-5579 allows use of the site until 2039; however, continued and progressive rehabilitation of the Domains listed in the Rehabilitation and Closure/MOP are considered achievable before this date.

MCW Environmental

Evidence of temporary grass cover for soil stabilisation and to minimise the total area exposed for dust generation was observed in some areas such as drains and around water structures. The new REA cannot be formerly completed (i.e. final batters) until the three Stages have been completed, estimated to be in approximately four to five years' time. It is noted that Area A including the REA was still under construction (Stage 2) at the time of the site inspection and therefore progressive rehabilitation was ongoing (as noted above) with Pit batters having been revegetated. However whilst construction is ongoing, rehabilitation of disturbed areas should be considered by WCS.

The management of Kerosene Vale was formerly the responsibility of Angus Place Colliery; however since approval of SD-5579 this is now the responsibility of WCS. WCS management acknowledged that other than updating sediment and erosion controls (observed by the auditors) at the Kerosene Vale site, rehabilitation of areas other than the ROM stockpile pad had not commenced. It is noted that Angus Place commenced works in 2014 at Kerosene Vale to sort and clear material stockpiles and that this process was still to be completed at the time of the site inspection. Acknowledging that DRE is keen see progressive rehabilitation to occur at Kerosene Vale WCS was found to be non-compliant with Condition 44, Schedule 3 of SSD-5579 given progressive rehabilitation has not commenced "as soon as reasonably practicable following disturbance".

9.5 Rehabilitation Performance

Rehabilitation monitoring (using Landscape Function Analysis or LFA) has been conducted at the western Centennial sites including WCS commenced in 2010 with 2014 comprising the fifth year of data acquisition for some of the monitoring sites. The results of the 2014 monitoring program identified that "*Rehabilitation performance at Coal Services differs between the sites, mostly reflecting the age of rehabilitation, with older sites generally performing better. CSV R1 and CSV R5 still have a poor rehabilitation performance rating with scores of 37 and 33, respectively. CSV R2 and CSV R3 perform satisfactorily with scores of 54 and 41, respectively. Finally, CSV R4 is the best performing area with good score of 68" (AECOM, 2014, p.55). AECOM (2014, p.69) noted that "<i>The SSCI scores have also increased for all sites in 2014, and some of the sites, particularly CSV R2 and CSV R4 now perform very well against the analogue sites benchmarks. This good performance (with the exception of CSV R5) is the consequence of dense vegetation cover – particularly woody vegetation across the sites, leading to the accumulation of quantities of leaf litter, driving all soil stability, infiltration and nutrient cycling properties of the soils.*

- Soil stability is excellent at CSV R2 and CSV R4 (i.e. index >60%, refer to Table 2), good at CSV R3 (i.e. comprised within 50-60%), and satisfactory at CSV R1 and CSV R5 (i.e. 40-50%);
- Infiltration potential is good at CSV R2 and CSV R4 (i.e. index comprised within 35-40%, refer to Table 2), satisfactory at CSV R3 (i.e. comprised within 30-35%), and poor at CSV R1 and CSV R5 (i.e. 40-50%); and
- Nutrient cycling is excellent at CSV R2 (i.e. index >35%, refer to Table 2), good at CSV R4 (i.e. 30-35%), satisfactory at CSV R3 (i.e. 25-30%), and poor at CSV R1 and CSV R5 (i.e. 20-25%)".

It is noted that rehabilitation monitoring transect locations CSV R1, CSV R2 and CSV R5 (established in 2007) and analogue CSV A1 and CSV A2 have been cleared as part of the new REA construction. Therefore only monitoring transect locations CSV R3 (established 2007) and CSV R4 and analogue location CSV A3 remain. CSV R4 is located in the Rehabilitation Initiative Area of the WCS and was established in the 1990s. AECOM (2015, p.8) confirm that "*The footprint of the enlarged REA to be constructed will extend over areas of both native vegetation and existing rehabilitation. In the process, four monitoring sites established in previous monitoring years will be lost including two rehabilitation sites (CSV R1 and CSV R2) and two analogue sites (CSV A1 and CSV A2) – these sites have therefore been removed from the monitoring program. Two new 'replacement' sites were established as part of this year's program of works to compensate for the loss of these historic monitoring sites, and included one rehabilitation site (CSV R6) and one analogue site (CSV A4)".*
AECOM (2014, p.55) note that "Overall and with the exception of CSV R4 (and to a lesser extent of BMC R2 and CSV R2), all sites clearly underperform against the benchmarks set by the analogue sites, which all have excellent scores >90". The 2015 Annual Rehabilitation Monitoring Report (AECOM, 2015, p.34) notes little improvement in the rehabilitation sites stating that "The 2015 monitoring event results indicated little variation in performance of rehabilitated sites across Coal Services in comparison to the 2014 results (i.e. all sites returned an overall site rating within the same band of values). With the exception of the older rehabilitation areas (where CSV R4 is located) the key issues undermining overall rehabilitation performance scores generally included:

- poor ground cover (including both grass cover and litter and debris),
- inadequate vegetation community structure and composition (species assemblages),
- low vegetation canopy cover,
- poor habitat complexity as available to native fauna, and
- weed incursion".

AECOM (2015, p.34) provided seven recommendations noting that "Although some of these parameters should naturally improve over time, others may require management actions in order to ensure self-sustaining rehabilitated landforms. In particular, any remediation works and ameliorative actions should in priority target those sites that show the lowest performance as reflected by their overall site rating". SSD-5579 allows use of the site until 2039; however, continued and progressive rehabilitation of the Domains listed in the 2015 / 2022 MOP are considered achievable well before this date.

9.6 Recommendations

The following recommendations are made concerning rehabilitation management:

REC-2016-19a – The recommendations provided in the 2015 Annual Rehabilitation Monitoring Report (AECOM, 2015, p.34) should be implemented as a priority. Progress against implementation of the recommendations should be formally monitored (i.e. through work orders) to ensure recommendations are being actioned. Recommendations comprised:

- Selection of appropriate species in the revegetation mix, including species for all strata including ground cover herbaceous species together with longer living species of lower storey shrubs and upper canopy species (eucalypts);

- Use fast growing and establishing sterile ground cover crop species to protect and stabilise the soil surface during the early phase of the rehabilitation program (such as Japanese Millet or cereal Rye-corn). -Undertake maintenance tube stock plantings of endemic canopy species in areas where trees and shrubs are failing to establish.

- Implementation of weed control measures particularly targeting Sifton Bush.

- Undertake regular walkthrough of rehabilitated areas to visually monitor erosion and consider implementing remediation works as required if overall landform stability gets compromised.

- Due to the lack of topsoil, the rehabilitated areas would greatly benefit from the addition / spread of organic material on the ground to enhance ground cover and organic matter. This can be in the form of brush material from local native plants, wood chips, compost, etc.

- Within established and future rehabilitation areas (areas where infrastructure is to be removed), install habitat structures such as rock or timber emplacements, stag trees as well as water features such as dams to encourage fauna re-colonisation and provide sheltered sites for plant regeneration as well as assisting in the prevention of erosion.

- Continuation of the annual rehabilitation monitoring program, and undertake the next round of monitoring in autumn 2016 to enable comparison with data recorded to date.

REC -2016-19b – The Rehabilitation and Closure Management Plan should be withdrawn and rehabilitation measures detailed in the MOP (November 2015 to October 2022) implemented.

REC -2016-20 – Commence characterisation of topsoils and subsoils to be used for rehabilitation at the earliest opportunity to ensure successful revegetation.

REC -2016-21 – WCS should continue to identify areas not required for operations and rehabilitate these, even for temporary rehabilitation, to reduce the potential for dust and soil erosion.

Refer to REC-2016-36 and REC-2016-37 (Condition 44, Schedule3).

10 Summary of Non Compliances and Recommendations

Some non-compliances have been identified with the Development Consent Conditions, EPL conditions, Mining Lease conditions and SoC conditions. These non-compliances as well as the requirements assessed as Not Verified and the associated recommendations have been consolidated and are summarised in **Table 10-1** below.

For a number of requirements that were assessed as compliant or not applicable, recommendations were made where continuous improvements were identified. These requirements and recommendations are summarised in **Table 10-2**.

Recommendations relating to observations of general environmental management, the adequacy of the various plans / programs are provided in Section 6.

Table 10-1 - Non-Compliant and Not Verified Conditions

Condition Number	Co	ondition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
SSD-5579	Surrender of Existing Development Consents		WCS management advised that they were consulting with landowners to surrender the previous consent and advise	Administrative Non-compliance
2.9	Prior to the end of December 2015, or as otherwise agreed by the Director-General, the Applicant shall surrender all existing development consents or approvals that it holds for the site in accordance with section 104A of the EP&A Act.		the s for the new consent. Letters had been drafted but had not been issued to the landowners at the time of the audit.	REC-2016-22 – Surrender existing development consents and approvals for the site in accordance with section 104A of the EP&A Act as required of the condition unless the Director General agrees another time.
	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.			
SSD-5579 3.6	Hours of Operation		A letter from WCS to DP&E dated 23 April 2015 noted that due to Angus Place Colliery being placed in care and maintenance the last coal truck to use the Wallerawang and Mount Piper haul roads was on 6 March 2015. WCS management considered that until Angus Place Colliery is taken out of care and maintenance it is expected that there will be no impact to residential receivers at locations NM1, NM2, NM3, NM4 and NM5 from haulage trucks.	Compliant (at time of audit)
	Except for the carrying out of construction, the Applicant shall comply with the operating hours in Table 2.			Not Verified between 4 April 2014 and 6 March 2015
	Activity	Operating Hours	It is noted that Wallerawang Power Station ceased operations in March 2014.	
	Coal transportation operations on the Angus Place to Wallerawang power station haul road	No truck movements to take place during the Night	WCS management reported that the weather station was not in place until July 2015 and therefore the site was unable to verify if truck movements up to 6 March 2015 occurred during adverse meteorological conditions during the Night. A spot check of Angus Place coal deliveries to Mount Piper Power Station between 16 April 2014 and 18 November 2014 identified some deliveries occurred at 12:23am (20/06/2014) and 11:53pm (29/05/2014).	
	Coal transportation operations on the	No truck movement to occur during	No activities, such as stockpiling of ROM coal were observed at Kerosene Vale during the site inspection.	
	Angus Place to Mount Piper power station haul road	adverse meteorological conditions during the Night	Given meteorological information concerning the operation of trucks during adverse meteorological conditions during the night up to 6 March 2015 was not available this condition could not be verified.	
	Kerosene Vale Coal Stockpile operations	During the Day only		
	All other operational activities	24 hours a day, 7 days per week		

Condition Number	Condition	Comments and Evidence Sighted for Audit Period
SSD-5579	Noise Criteria	A letter from Centennial to DP&E dated 18 January 2016 noted an exceedance of noise criteria against Co
3.7	Except for the carrying out of construction, and for the land in Table 1, the Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 3 at any residence on privately owned land.	two locations (NM6, NM7) on 12 and 13 January 2016. The letter noted "a complete and detailed review of noise, and Centennial's subsequent ability to feasibly and practically manage and mitigate these source underway, and a priority for the company".

Noise generated by the development is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy. Appendix 5 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to generate higher noise levels, and the Applicant has advised P&I in writing of the terms of this agreement.

The WCS Exceedance Records spread sheet identified three evening and night-time LAeq,15min dB nois exceedances for 2016 on 12 and 13 January 2016. The 2015 Annual Noise Monitoring Report prepared Acoustics Pty Ltd identified the following evening and night-time LAeq,15min dB noise criteria exceedance

January – Two plus one noise complaint / February – Four plus one noise complaint / March – Six plu • complaints / April - Seven / May - Three / June - Seven / July - One / November - Two / December

For the majority of the 2015 noise exceedances Global Acoustics (pp.42-45) noted that the overland conv noise source.

The 2014 Monthly Noise Monitoring Reports prepared by Global Acoustics Pty Ltd identified the following night-time LAeg,15min dB noise criteria exceedances for 2014:

July – Six / August – One / September – Six / October – Ten / November – Six / December - Six

A letter from WCS to DP&E dated 23 April 2015 noted that due to Angus Place Colliery being placed in ca maintenance that the last coal truck to use the Wallerawang and Mt Piper haul roads was on 6 March 20 until Angus Place Colliery is taken out of care and maintenance it is expected that there will be no impact receivers at locations NM1, NM2, NM3, NM4 and NM5. WCS management reported that there were no a in place with landowners during the audit period.

Centennial wrote to the DP&E on 11 November 2015 and provided an update concerning the noise mana WCS site. The letter noted that Centennial:

- Had engaged a Group Stakeholder Engagement manager in July 2015.
- Will update the Noise Impact Assessment for WCS and that an application to modify the WCS DC will during 2016.
- Planned a study supporting the identification of on-site mitigation measures to be commissioned by 3 2014

The construction of the Reject Emplacement Area (REA) was not included in SSD-5579 or the Noise Impa Assessment as a construction activity; however, it appeared from the letter that the DP&E considered reof the REA as construction for the purposes of the Construction Noise Management Plan. Centennial put the REAs are considered part of the site's operation and an area created throughout the life of a site rather stand-alone projects. Notwithstanding their view, Centennial noted they had submitted a Construction No Management Plan to DP&E that was approved on 17 August 2015.

Centennial acknowledged that DP&E had requested monthly noise compliance reporting but noted that it process of developing a regional noise monitoring program as it intends to rationalise its monitoring program Lidsdale/Wallerawang region. The regional plan would address noise and management requirements for The letter indicated that the regional plan is due for submission by 21 February 2016. SSCS was not awa current status of the regional plan as this was being prepared by Centennial corporate.

It is noted that WCS had engaged a noise consultant to conduct a noise assessment for conveyor OL-1 a point for OL-1 / OL-2 (Hatch, 2016) to further understand the issues and sound levels from these sources WCS and Centennial were considering the strategies provided in the report (Hatch, 2016) at the time of th inspection. WCS reported on 15 March 2016 that revised noise modelling had just been received at this ti support further investigations into appropriate noise controls.

Given the exceedances noted above this condition was found to be non-compliant. Recommendations are main report.

	Compliance Status (C/O/NC/NA) and Recommendation
ondition 3.7 at	Non-compliant
of the sources es is	Refer to REC-2016-16 (Section 5.5)
	Refer to REC-2016-17 (Section 5.5)
se criteria by Global es for 2015:	
us two noise r – Four	
eyor was the	
evening and	
are and 15. Therefore to residential greements put	
gement at the	
ll be submitted	
0 December	
act configuration t forward that er than short vise	
was in the am across the the WCS site. are of the	
nd the transfer of noise. ne site me and would	
e made in the	

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
SSD-5579 3.8	 Operating Conditions The Applicant shall: 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 processing operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent; 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); 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 e) Carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Director-General. 	A real-time noise monitoring unit is installed on Centennial owned land at Karrawatha Lane, close to NM4 and was installed in October 2015. The directional noise monitor (noise compass) was observed during the site inspection and uses multi-microphone array to monitor real-time noise from the conveyors (OL-1 and OL-2, the CHPP and the haul roads when operating). Attended monitoring is undertaken on a monthly basis. Shifts can be planned to manage potential noise issues by using a comparison of short-term meteorological forecasts with pre-prepared noise model outputs. Modelled scenarios with outputs for a comprehensive range of meteorological conditions allow mine planners to look up results for the modelled scenario nearest to that planned for next night shift. Predicted noise concerns can then be identified and shift operational plans changed if required. WCS management reported predictive monitoring was not operational at the time the haul roads were operational. Modelled scenarios would allow for the management of truck movements along the Mt Piper haul road. Operational noise monitoring locations are reviewed annually and modified, where necessary, as a result of monitoring results, changes to the mining operations or, changes in land ownership. Noise attenuation walls were observed along QL-2, conveyor and conveyors were observed to be enclosed on at least two sections. Conveyors are inspected daily to identify operational issues, such as loud rollers. PULSE issues Work Order system. Given the issues and comments shown by the DP&E, it is clear that current noise issues are a concern for the DP&E, hence noise management cannot be considered to be to the satisfaction of the Director General. As 3.8 a) requires best practice noise management and there remains noise compliance issues of concern to the DP&E WCS were assessed as being non compliant with this condition.	Non Compliant (REC-2016-16)
SSD-5579	Noise Management Plan	Preparation	Non-compliant
3.9	 The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Director-General. This plan must: a) Be prepared in consultation with the EPA, and submitted to the Director-General for approval within 4 months of the date of this approval, unless otherwise agreed by the Director-General; b) Describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this consent; c) describe the proposed noise management system in detail; and d) Include a monitoring program that: evaluates and reports on: o the effectiveness of the on-site noise management system; o compliance against the noise criteria in this consent; and o compliance with the noise operating conditions; includes a program to calibrate and validate real-time noise monitoring results with attended monitoring results over time (so the real-time noise monitoring program can be used as a better indicator of compliance with the noise criteria and as a trigger for further attended monitoring); and defines what constitutes a noise incident, and includes a protocol for identifying and notifying P&I and relevant stakeholders of any noise incidents. 	 a) The Noise Management Plan was approved by the Director-General on 15 September 2014 and was submitted for approval on 4 August 2014 (i.e. within 4 months of 4 April 2014). Section 1 notes the NMP was developed in consultation with the EPA; however, no evidence of consultation with the EPA was sighted during the audit. b) Section 5 of the NMP describes that mitigation measures will be implemented to ensure compliance with the noise criteria in Table 1; however, the specific mitigation measures to be employed were not clear. c) Section 5 describes the proposed noise management system. d) Section 5 includes a noise monitoring program. Implementation Noise management and mitigation measures were observed during the site inspection and the following is noted: A real time monitoring unit was observed to have been installed to manage and monitor noise emissions from the site. Operational noise levels are measured continuously at a strategic location off- site (Karrawatha Lane) using the real time monitoring unit (Section 5.1.2). Attended monitoring is undertaken monthly by an external consultant (Section 5.2). Conveyor transfer points were clad. Conveyor transfer points were clad. Conveyor CL-01 was covered on the northern side – sighted. Conveyor CL-01 was covered on the northern side – sighted. A noise barrier adjacent to CL-02 and approximately 1.3 km from Castlereagh Highway was sighted. The Noise Management Plan refers to 'mitigation measures' a number of times but does not specify what the mitigation measures are for the development, such as cladding and sound barriers. Given the exceedances noted in Condition 7, Schedule 3 above, implementation of the Noise Management Plan was found to be non-compliant. Recommendations are made in the main report.	Refer to REC-2016-18 (Section 5.5) Noting the Noise Management Plan may be superseded by a regional Centennial monitoring program.

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
SSD-5579 3.20 and EPL L1.1	Water Pollution Unless an EPL authorises otherwise, the Applicant shall comply with Section 120 of the POEO Act.	Under a former pollution study requirement of the Springvale EPL, Condition U3: Assessment of Potential Impacts of Pollutants at LDP-006WCS was required to monitor LDP-006 (by sampling and obtaining results by laboratory analysis) the concentration of a range of pollutants specified in the Condition. WCS was also required to monitor for the specified pollutants at the upstream and downstream locations within Neubecks Creek.	Not Verified REC-2016-26 – If required by the EPA, or as part of establishing a separate EPL for WCS_modify licence limits for
		A note to the condition stated "It is the EPA's intention to place water quality limits for these pollutants on all discharges via LDP6 based on the results of this assessment."	discharges from LDP-006 as appropriate.
		Following the collection of additional monitoring results up until 31 December 2013 WCS had to undertake an assessment of the pollutants detected in water discharged from the site via LDP6 in accordance with ANZECC water quality guidelines and provide the assessment to the EPA by 28 February 2014. GHD (GHD, 2014), completed a report titled 'Neubecks Creek ANZECC and ARMCANZ 2000 Assessment Environment Protection Licence Report' which was issued to the EPA to address Condition U3. Refer to Appendix A, EPL 3607 for further details.	
		A report was completed with water quality monitoring results provided over the monitoring period for the requested analytes comprising Conductivity, Dissolved iron, Dissolved manganese, Dissolved nickel, Total nickel, Total hardness, Dissolved zinc and Total zinc.	
		The report also generated Site Specific Trigger Values (SSTVs) and proposed Discharge Limits for Conductivity, Dissolved iron, Dissolved manganese, Dissolved nickel, hardness, and Dissolved zinc. SSTVs and proposed discharge limits were included in the sites Water Management Plan (RPS 2014).	
		The above program (Condition U3) was removed from EPL 3607 in the 10 December 2014 EPL variation. The EPA did not place water quality limits in the EPL for these pollutants on discharges via LDP6 following this assessment (to the date of the audit). It is noted that the EPA has made variations to other licenced discharge points on EPL 3607 (related to Springvale Colliery discharges), and have ongoing discretion to provide limits for the pollutants at LDP6 in the future.	
		On the basis that the EPA has required WCS to monitor for various analytes and report on these to the EPA; with the intent to create discharge criteria, it is evident that consideration has been given by the EPA to other analytes outside of the analytes that have discharge limits in the current EPL. Given the above and this consideration by the EPA, it is considered inappropriate to make a finding relevant to compliance with this condition. The status of compliance for this condition is therefore considered to be Not Verified.	
SSD-5579 3.22	The Applicant shall manage the remediation of the SCSS and the Kerosene Vale Coal Stockpile Area to the satisfaction of the EPA.	The Phase 2 Contamination Assessment (AECOM, 2014) was sent to the EPA on 2 June 2015 (Centennial, 2015). Kerosene Vale was not being used to stockpile coal at the time of the site inspection and the Phase 2 Contamination Assessment did not appear to include Kerosene Vale in the scope of works. WCS management reported there had been no instruction from the EPA concerning remediation at Kerosene Vale during the audit period.	Not Verified
		A new oil store had been constructed at the site following completion of the Phase 2 Contamination Assessment. AECOM (2014, p.III) stated that "based on the field observations and review of analytical data, no gross contamination was identified that would preclude the proposed development without first initiating remedial activities".	
		WCS provided email correspondence dated 2 March 2016 indicating Centennial were communicating with the EPA regarding actions required of the Phase 2 contamination assessments discussed above in Condition 21, Schedule 3.	
		Given there was no evidence to demonstrate remediation at the site and Kerosene Vale had been undertaken to the satisfaction of the EPA this condition was considered to be not verified.	

Condition Number

SSD-5579 The Applicant shall comply with the performance measures in Table 10 to the satisfaction A detailed assessment for each of the performance measures in Table 10 is presented in Appendix A. 3.23 of the Director-General.

Table 10 - Water Management Performance Measures

Feature	Performance Measure
Potable Water	Minimise the use of potable water for purposes where non-potable water is acceptable
Construction and operation	 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 and Volume 2C –Unsealed Roads, or its latest version Design, install and maintain all works within 40 m of watercourses generally in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPI 2012), or its latest version Design, installation and maintenance of 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
Sediment Dams	Design, install and maintain dams generally in accordance with Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries, or its latest version
Clean water diversions & storage infrastructure	 Design, install and maintain the clean water system to capture and convey the 100 year ARI flood, as far as is reasonable and feasible Maximise diversion of clean water around disturbed areas, as far as is reasonable and feasible
Mine-water storages	 Design, install and maintain the mine-water storage infrastructure to store all runoff from a 95 percentile 5 day rain event Prevent seepage from the DML and Cooks Dams to the surface, as far as is reasonable and feasible
Chemical and hydrocarbon storage	Chemical and hydrocarbon products to be stored in bunded areas in accordance with the relevant Australian Standards
Aquatic and riparian ecosystems, including affected sections of Wangcol and Lamberts Gully Creeks	 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

One exceedance of EPL 3607 pH criteria was recorded at LDP-006 on 10 September 2014 (6.46). WCS September 2014 exceedance was the result of high rainfall, 50.5mm that resulted in the discharge of surface the reject emplacement areas. Centennial reported the exceedance in the 2014 Annual Return, even thou criteria of 56 mm as specified in EPL 3607 Condition L2.5 was not exceeded. There was no pH exceedar from the data reviewed (08/01/2015 to 03/12/2015). The EPL range for pH at LDP-006 is 6.5 to 8.5. WC issue of surface water flow over reject emplacement areas by diverting surface water flows from these are maintaining freeboard in the Main Sediment Pond and intercepting surface runoff to Cooks Dam rather that

A result of 148 Nephelometric Turbidity Units (NTU) was recorded against an EPL 3607 criteria of 50 NTU 2015 at LDP-006. During the same event a TSS result of 63 mg/L was recorded against an EPL 3607 crit mg/L. These results were not considered to be exceedances as Condition L2.5 of EPL 3607 states that " concentration limits stipulated by condition L2.1/L2.4 for EPA identification point 6 is deemed not to apply discharge from the stormwater control structures (sediment dams) occurs solely as a result of rainfall mea premises which exceeds: a) for the Washery and Stockpile Sediment dams, a total of 56 millimetres of rai consecutive 5 day period". Rainfall recorded at LDP-006 in the five days before the discharge was 61 mn

56 mm of rain occurred in the five days prior to a discharge from LDP-006 on 23 January 2016 (ALS, 2016

WCS management reported that there were no discharges from LDP-007. The monthly Environmental M Reports April to December 2014 and January to January 2016 indicated there had been no discharge fror

EPL 3607 rainfall criteria of 56 millimetres of rainfall over any consecutive 5 day period applied to exceeda criteria noted above.

Given a revised Water Management Plan was in the process of being developed at the time of the site ins many of the features required were dependent upon the findings of the revised Water Management Plan, diversion of clean water, this condition was considered not verified.

It is noted that it was considered beyond the scope of this audit to assess compliance with the technical rethese performance measures. MCW Environmental auditors are not water specialists and have not asse detailed above nor assessed all potential contaminant sources on site.

Comments and Evidence Sighted for Audit Period

	Compliance Status (C/O/NC/NA) and Recommendation
	Not Verified
noted that the ace water from ugh rainfall nce for 2015 S mitigated the eas, an LDP-006.	REC-2016-28 – Update the Water Management Plan to include a TARP for Lamberts Gully in accordance with ANZECC 2000 and Using the ANZECC Guidelines and Water Quality Objectives in NSW procedures (DECC 2006), or its latest version.
J on 21 April iteria of 30 The when the asured at the infall over any m (ALS, 2016).	REC-2016-29 – Ensure the revised Water Management Plan includes strategies and measures for the diversion of clean and dirty water around disturbed areas, as far as is reasonable and feasible.
6). Ionitoring m LDP-007.	REC-2016-30 – Revise the existing site inspection to verify compliance with Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E
spection and such as equirements of ssed all data	

SSD-5579 Water Management Plan Prepara 3.24 The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Director-General. This plan must: A Water approve the Water Management Plan for the Director-General. This plan must: • Be prepared in consultation with the EPA, SCA, NOW, LCC, Forestry Corporation of NSW and Energy Australia by suitably qualified and experienced person/s whose appointment has been approved by the Director-General; A water approve	aration Iter Management Plan (RPS, 2014) was prepared in August 2014. The Water Management Plan has yet to be oved by the Director-General. WCS management reported that they were in the process of reviewing and updating /ater Management Plan as it was prepared on the assumption that a second washery would be constructed. WCS ogement reported that a second washery was unlikely to be constructed and therefore the plan and water balance	Not Verified
 3.24 The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Director-General. This plan must: Be prepared in consultation with the EPA, SCA, NOW, LCC, Forestry Corporation of NSW and Energy Australia by suitably qualified and experienced person/s whose appointment has been approved by the Director-General; 	ter Management Plan (RPS, 2014) was prepared in August 2014. The Water Management Plan has yet to be oved by the Director-General. WCS management reported that they were in the process of reviewing and updating /ater Management Plan as it was prepared on the assumption that a second washery would be constructed. WCS ogement reported that a second washery was unlikely to be constructed and therefore the plan and water balance	
 Be submitted to the Director-General; and conserving were support of the preparation of a site were support of protector-General; and conservent of sources and security of water supply, including contingency supply for future reporting periods; insign contingency supply for future reporting periods; including the investigating and associated potential for the other supply and evelopment; - a detailed description of the SCSS water management system; including the: - detailed plans, including design objectives and performance criteria for: - detailed plans, including design objectives and performance criteria for investigating any associated potential for the following, including trigger levels for with rehabilitated areas of the site; and investigating any associated potential water pollution from the rehabilitated areas of the site; and investigating any associated potential water pollution from the rehabilitated areas of the site; and investigating any associated potential water pollution from	ed to be updated to better reflect the site's operations and layout. Emails dated 29 July 2014 from Centennial to DRE, Energy Australia, the EPA, NSW Forests, LCC and the SCA were issued along with the WMP requesting feedback and comments concerning the WMP. Signed letters to the bove parties were also sighted. A letter from Centennial to DP&E dated 15 April 2014 was sighted requesting ipproval from the Director-General for two MPS Australia PVL tot prepare the WMP. Approval from the DP&E for he two RPS consultants to prepare the WMP was provided on 15 April 2014. The WMP was submitted to DP&E on 4 August 2014. Approval of the WMP was pending at the time of the site rspection. The Water Management Plan has been submitted to the DP&E, there has been no approval of the plan, hence cannot demonstrate satisfaction of the Plan by the Director General as required of the condition. Given this, the liance status of the condition is considered Not Verified. amentation 0 Condition 23. Schedule 3 for comments concerning compliance with and implementation of water management tranace measures. 1/2015 to 03/12/2015) monitoring for LDP-006 appeared to be conducted in accordance with Water Management 2/2015 to 03/12/2015) monitoring for LDP-006 appeared to be conducted in accordance with Water Management and November and December 2014 was available for review. ation measures were not clearly defined in the management flam, RPS (2013, p.25) note that <i>A review of existing</i> <i>ipproved projects in the area that could potentially generate a cumulative impact on surface waters has been</i> traken as part of the surface water impacts assessment (<i>RPS</i> 2013). The report summarises the significant test, here potential impact, mitigation measures and residual consequences. ² The Water Management Plan TARP CS (RPS, 2013), p.59-605 tates that the response an Amber condition will be an "Assessment of potential causes <i>vironment and Community Coordinator and application of appropriate mitigation measures</i> . No 'appropri	

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
SSD-5579 3.24	 Groundwater Management Plan that includes: 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: groundwater inflows to former open cut pits; the seepage/leachate from water storages, emplacements of power station ash and/or coal rejects, and former open cut voids; background changes in groundwater yield/quality against changes induced by the development; and impacts of the development on:		
SSD-5579 3.44	 Progressive Rehabilitation The Applicant shall progressively rehabilitate the site, including the Kerosene Vale Stockpile Area, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies must be employed where areas prone to dust generation are not subject to active operations but cannot yet be permanently rehabilitated. Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future. 	Evidence of temporary grass cover to minimise the total area exposed for dust generation and for soil stabilisation was observed during the site inspection. The new REA cannot be formerly completed (i.e. final batters) until the three Stages have been completed, estimated to be in approximately four to five years time. It is noted that Area A including the REA was still under construction (Stage 2) at the time of the site inspection and therefore progressive rehabilitation was ongoing (as noted above). However whilst construction is ongoing rehabilitation of disturbed areas should be considered. The management of Kerosene Vale was formerly the responsibility of Angus Place Colliery; however since approval of SD-5579 this is now the responsibility of WCS. WCS management acknowledged that other than updating sediment and erosion controls (observed by the auditors) at the Kerosene Vale site, rehabilitation of areas other than the ROM stockpile pad had not commenced. It is noted that Angus Place commenced works in 2014 at Kerosene Vale to sort and clear material stockpiles and that this process was still to be completed at the time of the site inspection. Acknowledging that DRE is keen see progressive rehabilitation to occur at Kerosene Vale this condition has found to be non-compliant given progressive rehabilitation has not commenced " <i>as soon as reasonably practicable following disturbance</i> ".	Non-compliant (for Kerosene Vale) Compliant (for Western Coal Services) REC-2016-35 – Continue progressive rehabilitation of disturbed areas to minimise the total area exposed for dust. REC-2016-36 – Commence progressive rehabilitation at Kerosene Vale (Domain 6) in accordance with Section 9.6 of the Rehabilitation and Closure Management Plan.

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
SSD-5579 5.2	 Adaptive Management The Applicant shall assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in this consent. 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 Applicant 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 Director-General. 	 Exceedences of noise criteria has occurred as discussed in conditions above relating to Noise e.g. Condition 7 Schedule 3. Centennial wrote to the DP&E on 11 November 2015 and provided an update concerning the noise management at the WCS site. The letter noted that Centennial: Had engaged a Group Stakeholder Engagement manager in July 2015. Will update the Noise Impact Assessment for WCS and that an application to modify the WCS DC will be submitted during 2016. A study supporting the identification of on-site mitigation measures was scheduled to be commissioned by 30 December 2015. Centennial acknowledged that DP&E had requested monthly noise compliance reporting but noted that it was in the process of developing a regional noise monitoring program as it intends to rationalise its monitoring program across the Lidsdale/Wallerawang region. The regional plan would address noise and management requirements for the WCS site. The letter indicated that the regional plan is due for submission by 21 February 2016. SSCS was not aware of the current status of the regional plan as this was being prepared by Centennial corporate. It is noted that WCS had engaged a noise consultant to conduct a noise assessment for conveyor OL-1 and the transfer point for OL-1 / OL-2 (Hatch, 2016) to further understand the issues and sound levels from these sources of noise. WCS and Centennial were considering the strategies provided in the report (Hatch, 2016) at the time of the site inspection. WCS reported on 15 March 2016 that revised noise modelling had just been received at this time and would 	Not Verified
		support further investigations into appropriate noise controls. This condition was considered not verified given WCS and Centennial were considering the strategies provided in the report (Hatch, 2016) at the time of the site inspection and other noise modelling and assessment reports conducted by Consultants for WCS and Centennial since this time.	
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	One exceedance of EPL 3607 pH criteria was recorded at LDP-006 on 10 September 2014 (6.46). WCS noted that the September 2014 exceedance was the result of high rainfall, 50.5mm that resulted in the discharge of surface water from the reject emplacement areas. Centennial reported the exceedance in the 2014 Annual Return, even though rainfall criteria of 56 mm as specified in EPL 3607 Condition L2.5 was not exceeded.	Non-compliant
		There was a pH exceedance at LDP-006 on 8 December 2014 of 6.39. No rainfall occurred in the five day period prior to the exceedance,	
		There was a pH exceedance at LDP-006 on 12 December 2014 of 6.11. Rainfall up to 17.6 mm occurred in the five day period prior to the exceedance,	
		There was no pH exceedance for 2015 from the data reviewed (08/01/2015 to 03/12/2015). The EPL range for pH at LDP-006 is 6.5 to 8.5. WCS reported they mitigated the issue of surface water flow over reject emplacement areas by diverting surface water flows from these areas, maintaining freeboard in the Main Sediment Pond and intercepting surface runoff to Cooks Dam rather than LDP-006.	
		The ALS online portal allows Lidsdale management to view 'live' data concerning LDP-006 as well as rainfall data. Given the two pH exceedances at LDP-006 in December 2014 this condition was found to be non-compliant.	
SoC 3.3	Material haulage will be managed to maintain compliance with the approved noise criteria on the private Haul Roads.	Haul truck tyre noise on the Mount Piper haul road was responsible for noise exceedances at receivers NM1, NM2, MN3, NM4, NM5 on the following dates during the audit period: 30 July 2014, 21 September 2014, 16 October 2014, 13 November 2014 and 17 December 2014.	Non-compliant (April 2014 to March 2015)
		A letter from WCS to DP&E dated 23 April 2015 noted that due to Angus Place Colliery being placed in care and maintenance, the last coal truck to use the Wallerawang and Mount Piper haul roads was on 6 March 2015. WCS management considered that until Angus Place Colliery is taken out of care and maintenance it is expected that there will be no impact to residential receivers at locations NM1, NM2, NM3, NM4 and NM5 from haulage trucks.	REC-2016-40 – Prior to the commencement of trucks using the haul roads investigate and implement measures to prevent exceedances of
		Given the above, WCS were observed to be Non-compliant within the period July 2014 to December 2014.	approved noise criteria.
		As there have been no haul trucks operating since 6 March 2015, WCS were compliant at the time of the site inspection.	

Condition Number	Condition	Comments and Evidence Sighted for Audit Period	Compliance Status (C/O/NC/NA) and Recommendation
SoC 3.4	Reduction of truck movements along Mt Piper Haul Road during prevailing noise enhancing weather conditions in order to meet the nominated Project Specific Noise Criteria. The default level will be zero trucking during these conditions until such time as noise monitoring confirms the truck movements required to meet the Project Specific	A letter from WCS to DP&E dated 23 April 2015 noted that due to Angus Place Colliery being placed in care and maintenance, the last coal truck to use the Wallerawang and Mount Piper haul roads was on 6 March 2015. WCS management considered that until Angus Place Colliery is taken out of care and maintenance it is expected that there will be no impact to residential receivers at locations NM1, NM2, NM3, NM4 and NM5 from haulage trucks.	Compliant (at time of audit) Not Verified between 4 April 2014 and 6 March 2015
	Noise Criteria during these conditions.	It is noted that Wallerawang Power Station ceased operations in March 2014.	
		WCS management reported that the weather station was not in place until July 2015 and therefore the site was unable to verify if truck movements up to 6 March 2015 occurred during adverse meteorological conditions during the Night. A spot check of Angus Place coal deliveries to Mount Piper Power Station between 16 April 2014 and 18 November 2014 identified some deliveries occurred at 12:23am (20/06/2014) and 11:53pm (29/05/2014).	
		No activities, such as stockpiling of ROM coal were observed at Kerosene Vale during the site inspection.	
		Given meteorological information concerning the operation of trucks during adverse meteorological conditions during the night up to 6 March 2015 was not available, this condition could not be verified.	
SoC 5.7	Apply for a separate EPL covering the entire PAA that includes LDP 003 (Kerosene Vale Stockpile Area) and LDP 006 and LDP 007 (conveyor at Duncan Street, Lidsdale).	A separate EPL covering the entire site that includes LDP-003 (Kerosene Vale Stockpile Area) and LDP-006 and LDP- 007 (conveyor at Duncan Street, Lidsdale) had not been applied for at the time of the site inspection.	Non-compliant Refer to REC-2016-01 (Main Report, Section 5.1.1)
		During the consultation process (Main Report, Chapter 3) the EPA noted that a standalone EPL would be beneficial for WCS.	
		It is noted that an EIS (RPS, 2013, p.135) mitigation measure for surface water management and mitigation is that SCSS will "Apply for a separate EPL covering the entire PAA that includes LDP 003 (Kerosene Vale Stockpile Area) and LDP 006 and LDP 007 (conveyor at Duncan Street, Lidsdale). The 2015 / 2022 MOP (Centennial, 2015, p.6) also states that "Western Coal Services will liaise with the EPA during the MOP period about obtaining an EPL which solely covers Western Coal Services".	
SoC 5.11	 DC 5.11 To better understand the groundwater linkages, within 12 months of Project Approval, a baseline groundwater monitoring program will be established for the Springvale Coal Services Site. The baseline groundwater monitoring program will include: Quarterly monitoring of water levels from a network of monitoring bores following the completion of construction; Six monthly sampling of monitoring bores for field analysis of pH, EC and temperature and laboratory analysis on major ions, pH, EC, TDS, dissolved arsenic, cadmium, chromium, copper, iron, lead, manganese, nickel and zinc; and An annual review so that its capacity as an accurate predictive tool can be assessed and maintained. 	A Water Management Plan (RPS, 2014) was prepared in August 2014. The Water Management Plan has yet to be approved by the Director-General. WCS management reported that they were in the process of reviewing and updating the Water Management Plan as it was prepared on the assumption that a second washery would be constructed. WCS management reported that a second washery was unlikely to be constructed and therefore the plan and water balance	Not Verified
		Given the revised Water Management Plan was in the process of being developed at the time of the site inspection this condition was considered not verified.	
		Section 5 of the Water Management Plan included an assessment of groundwater impacts at the site. Section 8.2 of the Water Management Plan included a groundwater monitoring program. The plan notes that " <i>The current groundwater monitoring network on WCS site comprises 15 monitoring bores (Table 8.2). The bores monitor the groundwater level and quality within the; saturated overburden, Lithgow Seam, and underlying Marrangaroo Formation. In August 2013 the groundwater monitoring network was expanded with the installation of four standpipe piezometers (BH07, BH08, BH09 and BH10). As part of this program, a routine groundwater monitoring program was recommended which included; monthly monitoring of water levels and basic water chemistry (pH and EC), and six monthly sampling for comprehensive water quality analysis" (RPS, 2014, p.44). Groundwater monitoring bores BH03 and BH06 were observed during the site inspection.</i>	
		The plan also notes that "Groundwater has been monitored at the WCS site since October 2010, however, a routine monitoring program is yet to be implemented" (RPS, 2014, p.53).	
		An Excel spread sheet of groundwater results from 22 May 2015 through to 11 November 2015 was available for review. The spread sheet included results for pH, EC, TDS, dissolved arsenic, cadmium, chromium, copper, iron, lead, manganese, nickel and zinc. Given an annual review of groundwater results was not available for review this condition was considered not verified.	

10.1 Additional Recommendations (not related to non-compliances)

The following table has been reproduced from **Appendix A**. For details on the requirement, and for further discussion of the issue, please refer directly to the table in **Appendix A**. Many recommendations are based around continuous improvement opportunities identified during the audit and do not necessarily represent immediate potential non-compliance issues.

Table 10-2 - Recommendations for Conditions Considered Compliant for Improved Compliance and Continuous Improvement

Approval & EPL Condition Number	Rec #	Recommendation	
Project App	oroval DA SSD-5	579	
Other Devel	Other Developments on the SCSS (WCS Site)		
2.17	REC-2016-43	Ensure issues such as water, noise and air quality management; biodiversity conservation; rehabilitation and future land uses are included in future consultation and engagement exercises with proponents /applicants of other approved developments/projects on the WCS such as Energy Australia.	
		Consider further environmental initiatives between WCS and Energy Australia with the aim of maximising environmental outcomes.	
Air Quality			
3.13	REC-2016-44	In Consultation with relevant agencies, consider relocating DG3 to a location more representative of background conditions at that location should long-term criteria exceedances for deposited dust continue.	
Operating Conditions			
3.16	REC-2016-23	Disturbed areas that aren't required for everyday use should be progressively rehabilitated.	
3.16	REC-2016-24	Consider setting targets to demonstrate all "reasonable and feasible measures to minimise the release of GHG emissions from the site are considered.	
3.16	REC-2016-25	Implement a program to regularly review the extent of disturbed areas to ensure all disturbed areas not required for production are rehabilitated or stabilised	
Remediation	n of Soil Contam	ination	
3.21	REC-2016-27	Discuss with the EPA as to whether an investigation (far up stream and far down stream) into heavy metal contamination of sediments in Wangcol Creek of WCS is warranted.	
Additional R	Rehabilitation Ini	tiatives	
3.26	REC-2016-31	Ensure that the recommendations provided in the 2012, 2013 and 2014 Rehabilitation Monitoring Report for Selected Centennial Mine Sites, Lithgow are implemented.	
Wangcol an	d Lamberts Gull	y Creeks	
3.27	REC-2016-32	Confirm with DP&E as to whether this condition (to improve the riparian habitat of Wangcol Creek for at least 100 metres downstream of the proposed Link haul road bridge crossing of the creek) applies if the link haul road bridge is not constructed.	
Biodiversity	Management Pl	an	
3.29	REC-2016-33	Ensure the Biodiversity Management Plan is sufficient to achieve biodiversity objectives for the undisturbed and rehabilitated areas given the Rehabilitation and Closure Management	

Approval	Rec #	
& EPL Condition		Recommendation
Number		
		has been superceded by the 2015 / 2022 MOP.
Waste		
3.42	REC-2016-34	Ensure the Annual Review reports on the on the effectiveness of waste minimisation and management measures in the Annual Review including a detailed breakdown of waste disposal.
Managemen	t Plan Requirem	nents
5.3	REC-2016-37	Ensure there is consistency in naming convention of areas of the WCS in the management plans (i.e. Domains).
5.3	REC-2016-38	Ensure the naming convention for sensitive receivers is the same across all plans
Environme	ntal Protection	Licence 3607
Dust		
O3.1	Refer to REC- 2016-35 and REC-2016-36	Refer to Table 10-1: Condition 44, Schedule 3 SSD-5579, Appendix A
Monitoring I	Records	
M1.2	REC-2016-39	Ensure that there is consistency in the reporting and presentation of results in the Monthly Environmental Reports including the provision of EPL criteria to allow the reader to easily interpret results.
M1.2	Refer to REC- 2016-26	Refer to Table 10-1: Condition 20, Schedule 3, SSD-5579
Statement of	of Commitment	s
5.3	Refer to REC- 2016-28, REC-2016-29 and REC- 2016-30	Refer to Table 10-1: Condition 23, Schedule 3, SSD-5579, Appendix A
5.9	Refer to REC- 2016-32	Refer to Table 10-1: Condition 27, Schedule 3, SSD-5579, Appendix A
5.10	Refer to REC- 2016-26	Refer to Table 10-1: Condition 20, Schedule 3, SSD-5579
Mining Leas	ses	
Rehabilitatio	on	
CCL-733- 07	Refer to REC- 2016-35 and REC-2016-36	Refer to Table 10-1: Condition 44, Schedule 3, SSD-5579
Safety		
CCL-733- 16	REC-2016-41	Restrict access to the derelict portal building at Kerosene Vale.

Approval & EPL Condition Number	Rec #	Recommendation		
Catchment Areas				
CCL-733- 32	REC-2016-42	It is recommended that site review the requirements of the Sydney Water Catchment Management Act 1998 and ensure that all conditions of the Act as relevant to operations at WCS are being complied with.		
		Refer to other recommendations regarding water management as relevant.		

Document or Area of Recommendation	Rec #	Recommendation
Section 4.2.1	Refer to REC- 2016-16 and REC-2016-17	Refer to Table 10-1: Condition 7, Schedule 3 Appendix A.
Section 5.1	REC-2016-01	WCS apply for a standalone Environmental Protection Licence so that monitoring requirements are consistent with the criteria specified in PA SSD-5579.
Section 6.3.1	REC-2016-02	That the structure of current management plans be improved so as to highlight management actions and mitigation measures that can be easily identified, implemented and audited against. This could include having a table or Section listing all of the management / mitigation measures required as part of the plan (similar to the TARPs in the Water Management and Rehabilitation and Closure Management Plans).
	REC-2016-03	That WCS request third parties that write management plans use the MOP and EIS for consistency of naming conventions or site areas (i.e. Domains) as well as monitoring locations. WCS should also ensure that document control is included on internally and externally prepared management plans.
	REC-2016-04	That roles and responsibilities for implementing monitoring and mitigation measures are stated within the early stages of the plans.
	REC-2016-05	That integration between the EMS, the Strategy and the management plans is improved. Each plan should outline its strategic context in line with the WCS EMS, the Strategy and Centennial Coal's Standards.
Table 7.1 (Air Quality Management Plan)	REC -2016-06	Update the Air Quality Management Plan to reflect actual measures that are implemented rather than proposed. Also include the location of air monitoring equipment
Table 7.1 (PIRMP)	REC-2016-07	Update the Plans / Figures appended to the PIRMP to clearly and legibly show the location of potential pollutants on the premises. Ensure the cross referencing of Figures correlates with those included in the PIRMP.
	REC-2016-08	Update the PIRMP to reflect roles and responsibilities
Water management, Section 7.6	REC-2016-09	Sediment and erosion controls should be improved in accordance with the Managing urban stormwater: soils and construction (Landcom, 2004) on the OL-3 ridge to minimise the potential for undermining of OL-3 footings and to better control surface water run-off towards the OL-3 / OL-4 transfer point (Refer to Photo 4-21).
	REC-2016-10	Until a longer term plan for the use of the Kerosene Vale stockpile area is agreed (within Centennial and/or with DRE) sediment and erosion controls should be installed on the exposed stockpile pad to stabilise the area, and reduce the sediment load at the flocculation station and LDP-003.
	REC-2016-11	That the Water Management Plan be fully reviewed and updated as was reported by WCS to be occurring. The revised Water Management Plan should review and include mitigation measures for groundwater seepage into Cook and DML dams.
	REC-2016-12	The revised Water Management Plan should provide a broader context for the management of saline discharges in the region and provide specific guidance to WCS for discharges at LDP-006.

Table 10-3 - Recommendations Relating to Management Plans and Site Observations

Document or Area of Recommendation	Rec #	Recommendation
	REC -2016-13	The management of the seepage on Castlereagh Highway should be addressed including finalising the draft GHD report; and implementing the GHD recommendations and agreed options.
	REC-2016-14	Consideration should be given to the long term management of water discharging from LDP-006, including post closure.
	REC-2016-15	The monitoring of discharges at LDP-006 should include eco-toxicology to assess the impacts of the site discharge on biota in Neubecks (Wangcol) Creek.
	Refer to REC - 2016-01	Refer to Section 5.1.1 – Environmental Protection Licences.
Noise, Section 8.5	REC-2016-16	The review, consideration and implementation of strategies to manage and mitigate the continued noise exceedances from the development should be expedited.
	REC-2016-17	Implementation of Centennial's Regional Noise Monitoring Plan should be expedited.
	REC-2016-18	At the next revision of the Noise Management Plan include the specific noise mitigation measures that apply to the WCS as developed from specialist reports to develop appropriate mitigation measures (subject to implementation of the regional Centennial Noise Monitoring Plan).
Rehabilitation, Table 6.2	Refer to REC- 2016-35 and REC-2016-36	Refer to Condition 44, Schedule 3, Appendix A.
Rehabilitation, Section 9.6	REC -2016- 19a	The recommendations provided in the 2015 Annual Rehabilitation Monitoring Report (AECOM, 2015, p.34) should be implemented as a priority. Progress against implementation of the recommendations should be formally monitored (i.e. through work orders) to ensure recommendations are being actioned. Recommendations comprised:
		- Selection of appropriate species in the revegetation mix, including species for all strata including ground cover herbaceous species together with longer living species of lower storey shrubs and upper canopy species (eucalypts);
		 Use fast growing and establishing sterile ground cover crop species to protect and stabilise the soil surface during the early phase of the rehabilitation program (such as Japanese Millet or cereal Rye-corn).
		- Undertake maintenance tube stock plantings of endemic canopy species in areas where trees and shrubs are failing to establish.
		 Implementation of weed control measures particularly targeting Sifton Bush.
		-Undertake regular walkthrough of rehabilitated areas to visually monitor erosion and consider implementing remediation works as required if overall landform stability gets compromised.
		-Due to the lack of topsoil, the rehabilitated areas would greatly benefit from the addition / spread of organic material on the ground to enhance ground cover and organic matter. This can be in the form of brush material from local native plants, wood chips, compost, etc.
		-Within established and future rehabilitation areas (areas where infrastructure is to be removed), install habitat structures such as rock or timber emplacements, stag trees as well as water features such as dams to encourage fauna re-colonisation and provide sheltered sites for plant regeneration as well as assisting in the prevention of erosion.

Document or Area of Recommendation	Rec #	Recommendation
		-Continuation of the annual rehabilitation monitoring program, and undertake the next round of monitoring in autumn 2016 to enable comparison with data recorded to date.
	REC -2016- 19b	The Rehabilitation and Closure Management Plan should be withdrawn and rehabilitation measures detailed in the MOP (November 2015 to October 2022) implemented.
	REC -2016-20	Commence characterisation of topsoils and subsoils to be used for rehabilitation at the earliest opportunity to ensure successful revegetation.
	REC -2016-21	WCS should continue to identify areas not required for operations and rehabilitate these, even for temporary rehabilitation, to reduce the potential for dust and soil erosion.
	Refer to REC- 2016-36 and REC-2016-37	Refer to Table 10-1: Condition 44, Schedule3.

11 Limitations of Report

MCW Environmental Consulting Pty Limited (MCW Environmental) has conducted this Independent Environmental Audit (IEA) and generated this report in accordance with the usual care and thoroughness of the consulting profession for the use of Springvale Coal Pty Ltd and only those third parties who have been authorised in writing by MCW Environmental 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. This IEA report did not assess any aspects relating to safety at the site.

The IEA Report is prepared in accordance with the scope of work and for the purpose outlined in the MCW Environmental Proposal dated 12 November 2015 and the signed contract executed between MCW Environmental and Springvale Coal Pty Limited.

Where this IEA Report indicates that information has been provided to MCW Environmental by third parties, MCW Environmental has made no independent verification of this information except as expressly stated in the Report. MCW Environmental assumes no liability for any inaccuracies in or omissions to that information.

This IEA Report was prepared between 19 January 2016 and 8 April 2016 and is based on the conditions encountered and information reviewed at the time of the site visit on 4 and 5 February 2016. MCW Environmental disclaims responsibility for any changes that may have occurred after the site visit.

This IEA Report should be read in full. 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 IEA Report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

Except as required by law, no third party may use or rely on this IEA Report unless otherwise agreed by MCW Environmental in writing. Where such agreement is provided, MCW Environmental will provide a letter of reliance to the agreed third party in the form required by MCW Environmental.

To the extent permitted by law, MCW Environmental expressly disclaims and excludes liability for any loss, damage, cost or expenses suffered by any third party relating to or resulting from the use of, or reliance on, any information contained in this IEA Report. MCW Environmental does not admit that any action, liability or claim may exist or be available to any third party.

Except as specifically stated in this section, MCW Environmental does not authorise the use of this IEA Report by any third party.

It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the site.

Appendix A Compliance Tables – Development Consent; Environmental Protection Licence, Mining Leases and Statement of Commitments Tables

Developme	evelopment Consent SSD-5579					
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation		
2.1	OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT In addition to meeting the specific performance criteria established under this approval, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the development.	-	Other than where issues have been identified, in general WCS appeared to be compliant with its obligation to minimise harm to the environment. The Environmental Management Strategy and associated management plans and procedures have been established and generally implemented to identify, plan for and manage environmental aspects and impacts related to the development.	Compliant Refer to the recommendations within this document and the audit report for areas of non- compliance and identified opportunities for improvement.		
2.2	 TERMS OF APPROVAL The Applicant shall carry out the development generally in accordance with the: a) EIS; b) Statement of Commitments; and c) Conditions of this approval. 	-	Based on a high level review of these documents, WCS is considered to have carried out the development in general accordance with the EIS, Statement of Commitments, and Conditions of Approval. Options to capture water from the catchments above the site as defined in the EIS were reported by site management to not be practical and that the site was considering further options. This is discussed in more detail in the main report and compliance checklists. Many of the planned developments as indicated in the EIS have not been constructed such as the haul road across Castlereagh Highway and the second Coal Handling and Preparation Plant. WCS reported that there is no current planning to undertake these activities and that the construction of the Reject Emplacement Area (REA) is the main activity being constructed that was proposed in the EIS. Compliance against individual provisions of SSD-5579 has been assessed in this audit with commentary provided against specific items as detailed below. A comparison against the scope of works and environmental controls described in the referenced documents indicated general consistency with auditors site observations and documentation reviewed (as detailed throughout this appendix).	Compliant		
2.3	If there is any inconsistency between the above documents, 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.	-	Noted. The site advised that it is not aware of any inconsistencies between the above and the conditions of SSD-5579 with the intent of the EIS. None were identified through the audit process.	Noted		
2.4	 The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the P&I's assessment of: a) Any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this approval; and b) The implementation of any actions or measures contained in these documents. 	 Letter – DP&E (2015), WCS – Annual Review 2014, 20 March 2015. Letter – Centennial (2015), WCS - Annual Review, 23 April 2015. 	There has been no known request from the Director-General concerning implementation of reports, strategies, plans, programs, reviews, audits or correspondence, thus this requirement has not been triggered within the audit period. Site management reported that DP&E have reviewed and commented on the various plans required, and have approved the majority of the plans, however were yet to approve the Water Management Plan. WCS management reported that they were planning to rewrite the Water Management Plan to take into account works not planned to be constructed and to base the plan on more considered information gained from further water balance studies. For example the EIS was developed based on a proposed secondary washery that had not been built at the time of the site inspection. Site management reported that without a second washery there was a water surplus at the site and hence the water balance would be affected. In a letter dated 20 March 2015, DP&E requested further information from the site concerning Condition 17 – Schedule 3, Condition 4 – Schedule 2, Condition 8 – Schedule 3 and Condition 3 - Schedule 4 following review of the Annual Review. Centennial responded to DP&E in a letter dated 23 April 2015 (Centennial, 2015) noting that plans where requested had been updated and also supplied noise information as requested in DP&E's letter.	Compliant		

A-1

Developme	ent Consent SSD-5579		
Condition No.	Condition	Evidence Source	Comment / Finding
2.5	LIMITS ON CONSENT	-	Noted
	The Applicant may carry out coal transportation and processing operations on the site until 30 June 2039.		
	Note: Under this consent, the Applicant is required to rehabilitate the site and perform additional undertakings to the satisfaction of both the Director-General and the Director Environmental Sustainability. Consequently, this consent will continue to apply in all other respects other than the right to conduct coal transportation and processing operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.		
2.6	Coal Processing	Centennial (2015), WCS –	WCS operates at the development specified in SSD-5579.
	The Applicant shall not:	Annual Review 2014, 23 April 2015.	WCS production figures for the audit period were sighted. The follow was reported:
	 a) Receive more than a total of 9.5 million tonnes of ROM coal at the SCSS in any calendar year, including not more than 1.0 million tonnes of ROM coal from sites other than Angus Place and Springvale Collieries; and b) Process more than 7 million tonnes of ROM coal at the SCSS in any calendar year. 	 Letter - Centennial (2015), WCS – Annual Review 2014, 23 April 2015 [to DP&E]. Email - Centennial (2016), 	 a) 2014: 3,487,621 tonnes of ROM received. b) 2014: 2,311,037 tonnes of ROM coal processed. c) 2015: 3,853,628 tonnes of ROM received and processed.
		WCS Annual Report Data Request, 19 January 2016.	A letter from WCS to DP&E dated 23 April 2015 noted that due to A being placed in care and maintenance the last coal truck to use the Mount Piper haul roads was on 6 March 2015.
			Based on the volume of coal going off-site, limited material stockpil inspection and the tonnage volumes for 2014 and 2015 this condition compliant.
2.7	Coal Transport	Site observations	Coal was observed to be transported to site by conveyor during the
	The Applicant shall ensure that all product coal is transported from the SCSS by conveyor.		No coal road haulage trucks were observed using the haul roads on site inspection. Coal could not be loaded onto the stockpile from an other than conveyor.
2.8	The Applicant shall ensure that not more than 6.3 million tonnes of product coal is transported from the SCSS to the Lidsdale Siding Coal Loader in any calendar year.	 Centennial (2015-A), WCS – Annual Review 2014, 23 April 2015. Letter - Centennial (2015-B), WCS – Annual Review 2014, 23 April 2015 [to DP&E]. Email - Centennial (2016), WCS Annual Report Data Request, 19 January 2016. 	In 2014 3,487,621 tonnes of ROM was received at WCS. An interr (Centennial, 2015-B) indicated that in 2015, 3,853,628 tonnes of Ro and processed at WCS.
2.9	Surrender of Existing Development Consents	-	WCS management advised that they were consulting with landown
	Prior to the end of December 2015, or as otherwise agreed by the Director-General, the Applicant shall surrender all existing development consents or approvals that it holds for the site in accordance with section 104A of the EP&A Act.		previous consent and advise them of the new consent. Letters had not been issued to the landowners at the time of the audit.
	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.		
2.10	Prior to the surrender of any existing development consent, the conditions of this consent shall prevail to the extent of any inconsistency with the conditions of that consent.	-	Noted



	Compliance Status & Recommendation
	Noted
	Compliant
wing ROM coal handled	
Magus Place Colliery Wallerawang and	
ed at the time of the site	
on was considered	
e site inspection.	Compliant
nother form of transport	
al Centennial email	Compliant
OM coal was received	
ers to surrender the I been drafted but had	Administrative Non- compliance
	REC-2016-22 – Surrender existing development
	consents and approvals for the site in accordance with
	section 104A of the EP&A Act as required of the
	Condition unless the Director General agrees another time.
	Noted

Appendix A: Compliance Tables

Developme	Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
2.11	STRUCTURAL ADEQUACY	- WCS management reported that no new structures or alterations to existing buildings were		Not Activated	
	The Applicant shall 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.		constructed during the audit period.		
	Notes:				
	 Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works; and Part 8 of the EP&A Regulation sets out the requirements for the certification of the development. 				
2.12	DEMOLITION	-	WCS management reported that no structures were demolished during the audit period.	Not Activated	
	The Applicant shall ensure that all demolition work is carried out in accordance with <i>Australian Standard AS 2601-2001: The Demolition of Structures</i> , or its latest version.				
2.13	PROTECTION OF PUBLIC INFRASTRUCTURE	-	WCS reported that no infrastructure had been damaged, hence this condition had not been	Not Activated	
	Unless the Applicant and the applicable authority agree otherwise, the Applicant shall:		activated		
	 a) Repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and b) Relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development. 				
	Note: This condition does not apply to damage to roads caused as a result of general road usage.				



Developme	Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding		
2.14	 OPERATION OF PLANT AND EQUIPMENT The Applicant shall ensure that all the plant and equipment used at the site, or to transport coal from the site, is: a) Maintained in a proper and efficient condition; and b) Operated in a proper and efficient manner. 	 ALS Station History – Hydrometric Monitoring - 26/06/2015, 28/07/2015, 11/08/2015 ALS Station History – Level / Flow / QQ – LDP004 - 20/02/2015, 09/12/2014, 11/09/2015 ALS Station History – Level / Flow / QQ – LSVDP006 – 09/12/2014, 10/04/2015, 16/06/2015, 11/09/2015. ALS (2015), Lidsdale Siding Hydrometric Operation Maintenance And Data Dissemination Report for 2015, December 2015. Quarterly Service Reports – 02/12/2015, 02/09/2015, 06/05/2015, 03/03/2015, December 2014, 27/05/2014, 11/02/2014. GHD (2016), Lambert Gully REA Operation and Maintenance Manual for REA and A Pit Maintenance Upgrade, February 2016, 21/24377. Statement of Attainments – Inspect and Report on Embankment and Dam Safety. Environmental Inspection Sheets – 03/12/2015, 27/11/2015, 12/10/2015, 11/01/2016, 180/01/2016, 27/01/2016 Work Order VL46570 - Daily Inspection 'A' Pit Emplacement Area. Work Order VL21284/ VL27345/ VL24410 - Daily Inspection 'on Old Co- Disposal. REA Construction Environmental Inspection Sheet – 21/01/2016, 17/01/2016, 05/01/2016, 27/01/2015, 20/11/2015, 03/11/2015, 20/11/2015, 03/11/2015, 20/11/2015, 03/11/2015, 20/11/2015, 03/11/2015, 20/11/2015, 03/11/2015, 18/12/2015, 03/11/2015, 20/11/2015, 03/11/2015, 20/10/2015, 03/11/2015, 20/10/2015, 04/09/2015. 	 It was beyond the scope of this audit to complete a full assessment of condition given the very broad nature of the requirement. Notwithsta following documents were sighted and related observations made: a) Maintenance: ALS (2015), Lidsdale Siding Hydrometric Operation Ma Dissemination Report 2015 ALS Station History (Level / Flow / QQ) records for LDF ALS Station History (Level / Flow / QQ) records for LDF ALS Station History (Level / Flow / QQ) records for LDF ALS Station History (Level / Flow / QQ) records for LDF ALS Station History (Level / Flow / QQ) records for LDF ALS Station History (Level / Flow / QQ) records for LDF ALS station History (Level / Flow / QQ) records for LDF ALS station History (Level / Flow / QQ) records for LDF ALS station History (Level / Flow / QQ) records for LDF ALS station History (Level / Flow / QQ) records for LDF ALS station History (Level / Flow / QQ) records for LDF ALS station History (Level / Flow / QQ) records for LDF ALS station History (Level / Flow / QQ) records for LDF alto a data, comparison of logged data to independent adjusted (ALS, 2015, p.5). Quarterly Service Reports were sighted for the effluent the Control Room and Lunch Room buildings. The audit focused on the maintenance of plant and equenvironmental management, as compared to production for pending and completed tasks. Inspections of the Co-Disposal dam, 'A' Pit and the old Daily inspections of the Co-Nisposal dam, 'A' Pit and the old Daily inspections of the Conveyor and Work Orders for components are conducted. Statements of Attainment for ten WCS staff were sighte Embankment and Dam Safety inspections. 		

Compliance Status & Recommendation

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treatment systems at

uipment related to n related equipment.

ant and maintenance Supervisor explained mber of Work Orders

REA are conducted. defective conveyor

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Appendix A: Compliance Tables

Developme	evelopment Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
2.15	 STAGED SUBMISSION OF ANY STRATEGY, PLAN OR PROGRAM With the approval of the Director-General, the Applicant may submit any strategy, plan or program required by this approval on a progressive basis. Note: While any strategy, plan or program may be submitted on a progressive basis, the Applicant will need to ensure that the operations on site are covered by suitable strategies, plans or programs at all times. 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. 	-	WCS management reported that this requirement had not been triggered.	Not Activated	
2.16	Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant shall implement the existing strategies, plans or programs for the site that have been approved under existing development consents or approvals.	-	Noted	Noted	
2.17	 OTHER DEVELOPMENTS ON THE SCSS The Applicant shall consult and engage with the proponents/applicants of other approved developments/projects on the SCSS, with the aim of maximising the outcomes of all developments/projects with respect to: Operational efficiencies; Water, noise and air quality management; Biodiversity conservation; Rehabilitation; and Future land uses. 	 Energy Australia, Centennial / Energy Australia Coal Meeting Minutes dated 6 August 2015 Energy Australia, Centennial / Energy Australia Coal Meeting Minutes dated 12 November 2015 Energy Australia, Centennial / Energy Australia, Centennial / Energy Australia Coal Meeting Minutes dated 10 December 2015 	 Minutes of a meeting held at Mt Piper Power Station between Centennial and Energy Australia representatives were sighted. The Minutes addressed Centennial operations in the region including WCS. The Minutes noted that the Manager of WCS was to change, stock levels at the time of the meeting were noted and the quality of coal was also noted. Issues concerning water, noise and air quality management; biodiversity conservation; rehabilitation and future land uses did not appear to have been discussed or documented. WCS was found to be compliant with this condition as evidence of consultation and engagement with the proponents/applicants of other approved developments/projects on the WCS was available; however, it is considered there is substation potential to increase the outcomes in relation to this condition, particularly for the areas of biodiversity conservation; rehabilitation and future land uses. In addition, the requirements of this condition should be discussed and all relevant discussion and commitments documented at these events. WCS management reported that Energy Australia requested the compound at the transfer point at OL-4 / OL- 5 conveyors be cleaned to facilitate water management on Energy Australia land. SSCS management reported that a diversion bund will be constructed to divert surface water to sediment control structures outside the compound. Future land issues were reported to be discussed concerning Area 4 handover. 	Compliant REC-2016-43 – Ensure issues such as water, noise and air quality management; biodiversity conservation; rehabilitation and future land uses are included in future consultation and engagement exercises with proponents /applicants of other approved developments/projects on the WCS such as Energy Australia. Consider further environmental initiatives between WCS and Energy Australia with the aim of maximising environmental outcomes.	
3.1	ACQUISITION ON REQUEST Upon receiving a written request for acquisition from the owner of B4 – Blackmans Flat, Mason (east) – Wolgon Road, the Applicant shall acquire the land in accordance with the procedures in Conditions 5 – 6 of Schedule 4.	-	No requests for acquisition were reported to have been received by WCS, hence this condition has not been triggered.	Not Activated	
3.2	ADDITIONAL MITIGATION UPON REQUEST Upon receiving a written request from the owner of any residence on the land listed in Table 1, the Applicant shall implement additional noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible and directed towards reducing the noise impacts of the development on the residence. If within 3 months of receiving this request from the owner, the Applicant 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 Director- General for resolution.	-	No requests for acquisition were reported to have been received by WCS, hence this condition has not been triggered.	Not Activated	

Developme	nt Consent SSD-5579		
Condition No.	Condition	Evidence Source	Comment / Finding
3.3	NOISE Construction Noise The Applicant shall prepare and implement a Construction Noise Management Plan prepared in accordance with the EPA's Interim Construction Noise Guideline 2009 (or any relevant updated version), to the satisfaction of the Director-General This plan must be prepared in consultation with the EPA, and be approved by the Director-General prior to commencing construction.	 Centennial, (2015-A), Construction Noise Management Plan, February 2015. Centennial (2015-B), WCS – Annual Review 2014, 23 April 2015. Letter – DP&E (2015-C), WCS Construction Management Plans, 17 August 2015. Centennial (2014), Noise Management Plan, July 2014. Global Acoustics, Environmental Noise Monitoring, July 2014, Ref: Reference: 14172_R01 Global Acoustics, Environmental Noise Monitoring, August 2014, Ref: 14271_R01 Global Acoustics, Environmental Noise Monitoring, September 2014, Ref: 14288_R01 Global Acoustics, Environmental Noise Monitoring, October 2014, Ref: 14321_R01 Global Acoustics, Environmental Noise Monitoring, November 2014, Ref: 1436_R01 Global Acoustics, Environmental Noise Monitoring, December 2014, Ref: 1436_R01 Global Acoustics, Environmental Noise Monitoring, December 2014, Ref: 14386_R01 Global Acoustics, Annual Report, Environmental Noise Monitoring 2015, Ref: 15434_R02. WCS Exceedance Records. Xls. Hatch (2016), Noise Assessment and Control Advice for Conveyor OL1 and Transfer Point OL1 to OL2, Ref: H350529-0000-07-124- 0001, Rev B. 	Preparation WCS management reported that the EIS was developed on the assum washery and associated haul roads would be constructed at the site. <i>A</i> site inspection the second washery and associated haul roads had not and WCS management reported that it was unlikely this infrastructure of constructed in the foreseeable future. WCS management did not belie the REA constituted the need for a CNMP as it is considered a typical site at letter to DP&E dated 11 November 2015 (Centennial, 2015-C, pp.: stated that "Centennial notes the Department's comments regarding th Noise Management Plan and its application to the currently under construction that "centennial notes the Department's contemplates conthat would be the subject of construction noise management. Construct in the instrument of consent and neither the Noise Impact Assessment Department's Assessment Reports for the Project contemplates record Reject Emplacement Area as construction for the purposes of the Cord Management Plan. The main reason for this is that the Reject Emplacement Pare as construction and an area created throughou. Project, rather than for periods of intensity as contemplated by the Inte Noise Management Plan. The main reason for this is that the Reject Emplacement Plan to the Department, which was approved on 1 At the time of the site inspection Stage 1 of the new REA was complete formal sign-off. Preparation for Stage 2 construction was underway. Indementation A letter from WCS to DP&E dated 23 April 2015 noted that where on-si and adaptive management of infrastructure is not effective or feasible 0 engage with landowners concerning the most appropriate solution to an a daptive in Blackmans Flat village (NM1) and had received to demolish these properties.
3.4	Construction Hours The Applicant may only undertake construction activities between the hours of 7am to 6pm Monday to Friday, and 8am to 1pm Saturday, with no construction activities on Sundays or public holidays, unless otherwise agreed to by the Director-General in accordance with condition 5 of Schedule 3.	 Centennial (2015), WCS – Annual Review 2014, 23 April 2015. WCS Community Complaints Register (April 2014 / December 2015). 	While the site operates 24 hours per day, construction of Stage 1 of the by site management to be confined to the hours specified in the conditi able to be verified by the auditors, however, the REA construction work dissimilar to the general works at the stockpile location and further from Construction of the washery and haul roads had not commenced durin There were no construction related complaints during the period April 2 2015

Compliance Status & Recommendation

Compliant

nption that a second At the time of the t been constructed would be eve construction of site activity.

.3-4) Centennial he Construction struction Reject nstruction activities iction is not defined t not the nfiguration of the nstruction Noise cement Areas are ut the life of a erim Construction ed a Construction 17 August 2015". .

e and was awaiting

eing used to inspection. A array is used (and e existing noise

site noise attenuation Centennial will address noise issues. onditioning at but one of the ed Council approval

he REA was reported Compliant tion. This was not ks are not too m residents.

ng the audit period.

2014 to December

Appendix A: Compliance Tables

Developme	nt Consent SSD-5579			
Condition No.	ondition o. Condition		Evidence Source	Comment / Finding
3.5 Out of Hours Construction Works If the Applicant proposes to undertake any construction works outside the hours specified in condition 4 of Schedule 3, then the Applicant must prepare and implement an Out of Hours Work Protocol for these works to the satisfaction of the Director-General. This protocol must be prepared in consultation with the EPA and the residents who would be affected by the noise generated by these works, and be consistent with the requirements of the ICNG. The Applicant shall not carry out any out of hours construction works before this protocol has been approved by the Director-General.		-	WCS management reported that construction works for Stage 1 of conducted outside of the hours specified in Condition 4.	
3.6	Hours of Operation Except for the carrying out of construction hours in Table 2.	n, the Applicant shall comply with the operating	 Centennial (2015), WCS – Annual Review 2014, 23 Apri 2015 WCS Community Complaints 	A letter from WCS to DP&E dated 23 April 2015 noted that due to being placed in care and maintenance the last coal truck to use Mount Piper haul roads was on 6 March 2015. WCS manageme Angus Place Colliery is taken out of care and maintenance it is e
	Activity	Operating Hours	Register (April 2014 / December 2015).	ho impact to residential receivers at locations NM1, NM2, NM3, Ni haulage trucks.
	Coal transportation operations on the Angus Place to Wallerawang power station haul road Coal transportation operations on the Angus Place to Mount Piper power station	No truck movements to take place during the Night No truck movement to occur during adverse meteorological conditions during	 Angus Place Deliveries Spread Sheets (XIs) – 16 April 2014 to 18 November 2014. 	It is noted that Wallerawang Power Station ceased operations in M WCS management reported that the weather station was not in pla therefore the site was unable to verify if truck movements up to 6 I during adverse meteorological conditions during the Night. A spot coal deliveries to Mount Piper Power Station between 16 April 201 2014 identified some deliveries occurred at 12:23am (20/06/2014)
	Kerosene Vale Coal Stockpile operations	During the Day only		(29/05/2014). No activities, such as stockpiling of ROM coal were observed at Ke site inspection.
	All other operational activities	24 hours a day, 7 days per week		Given meteorological information concerning the operation of truck meteorological conditions during the night up to 6 March 2015 was condition could not be verified.



Compliance Status & Recommendation

the REA were not

Not Activated

o Angus Place Colliery the Wallerawang and nt considered that until spected that there will be M4 and NM5 from

Compliant (at time of audit) Not Verified between 4 April 2014 and 6 March 2015

March 2014.

blace until July 2015 and 6 March 2015 occurred ot check of Angus Place 014 and 18 November 4) and 11:53pm

Kerosene Vale during the

cks during adverse as not available this

Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding	
3.7	Noise Criteria Except for the carrying out of construction, and for the land in Table 1, the Applicant shall ensure that the noise generated by the development does not exceed the criteria in Table 3 at any residence on privately owned land. Noise generated by the development is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy. Appendix 5 sets out the meteorological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria apply and the requirements for evaluating of the relevant residence or land to generate higher noise levels, and the Applicant has a divised P&I in writing of the terms of this agreement.	 Centennial (2015), WCS – Annual Review 2014, 23 April 2015 [to DP&E]. Letter – Centennial (2015), WCS (SSD-5579) and Lidsdale Siding (PA-08_0223) Noise, 11 November 2015 Letter – Centennial (2015), WCS (SSD-5579) Noise, 18 January 2015 [to DP&E] Global Acoustics, Environmental Noise Monitoring, July 2014, Ref: Reference: 14172_R01 Global Acoustics, Environmental Noise Monitoring, August 2014, Ref: 14271_R01 Global Acoustics, Environmental Noise Monitoring, September 2014, Ref: 14288_R01 Global Acoustics, Environmental Noise Monitoring, October 2014, Ref: 14321_R01 Global Acoustics, Environmental Noise Monitoring, November 2014, Ref: 14366_R01 Global Acoustics, Environmental Noise Monitoring, December 2014, Ref: 14386_R01 Global Acoustics, Environmental Noise Monitoring 2015, Ref: 15434_R02. WCS Exceedance Records. XIs. Hatch (2016), Noise Assessment and Control Advice for Conveyor OL1 and Transfer Point OL1 to OL2, Ref: H350529-0000-07-124- 0001, Rev B. 	 A letter from Centennial to DP&E dated 18 January 2016 noted an excerteria against Condition 3.7 at two locations (NM6, NM7) on 12 and 1 The letter noted "a complete and detailed review of the sources of not subsequent ability to feasibly and practically manage and mitigate the underway, and a priority for the company". The WCS Exceedance Records spread sheet identified three evening LAeq,15min dB noise criteria exceedances for 2016 on 12 and 13 Jan 2015 Annual Noise Monitoring Report prepared by Global Acoustics P following evening and night-time LAeq,15min dB noise criteria exceed January – Two plus one noise complaint February – Four plus one noise complaint March – Six plus two noise complaints April – Seven June – Seven The 2014 Monthly Noise Monitoring Reports prepared by Global Acoustics (pp. overland conveyor was the noise source. The 2014 Monthly Noise Monitoring Reports prepared by Global Acoustics (pp. overland conveyor was the noise source. The 2014 Monthly Noise Monitoring Reports prepared by Global Acoustics (pp. Outpet – Six October – Ten November – Six December – Six December – Six Aletter from WCS to DP&E dated 23 April 2015 noted that due to Ang being placed in care and maintenance that the last coal truck to use th Mt Piper haul roads was on 6 March 2015. Therefore until Angus Plac out of care and maintenance that the last coal truck to use the Mt Piper haul roads was on 6 March 2015. Therefore until Angus Plac out of care and maintenance that the last coal truck to use the Mt Piper haul roads was on 6 March 2015. Therefore until Angus Plac out of care and maintenance the suppared that there will be no impact receivers at locations NM1, NM2, NM3, NM4 and NM5. WCS manage there were no agreements put in place with landowners during the aux Centennial wrote to the DP&E on 11 N	

exceedance of noise d 13 January 2016. noise, and Centennial's hese sources is

ng and night-time anuary 2016. The s Pty Ltd identified the edances for 2015:

Compliance Status & Recommendation

Non-compliant

Refer to **REC-2016-16** (Section 5.5)

Refer to **REC-2016-17** (Section 5.5)

p.42-45) noted that the

coustics Pty Ltd e criteria exceedances

Angus Place Colliery e the Wallerawang and Place Colliery is taken act to residential agement reported that audit period.

an update concerning ennial:

uly 2015. application to modify

ures was scheduled to

not included in SSDy; however, it appeared e REA as construction Centennial put forward n area created cts. Notwithstanding Noise Management

Developme	Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
3.8	 Operating Conditions The Applicant shall: f) Implement best management practice to minimise the construction, operational and road noise of the development; g) 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 processing operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent; h) Minimise the noise limits in this consent do not apply (see Appendix 5); i) 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 j) Carry out regular monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Director-General. 	 Centennial (2014), Noise Management Plan Western Coal Services, July 2014. Global Acoustics, Environmental Noise Monitoring Reports - July 2014, August 2014, September 2014, October 2014, November, December 2014. Global Acoustics, Annual Report, Environmental Noise Monitoring 2015, Ref: 15434_R02. WCS Exceedance Records. XIs. Hatch (2016), Noise Assessment and Control Advice for Conveyor OL1 and Transfer Point OL1 to OL2, Ref: H350529-0000-07-124- 0001, Rev B. 	 Continued: Centennial acknowledged that DP&E had requested monthly noise compliance reporting but noted that it was in the process of developing a regional noise monitoring program as it intends to rationalise its monitoring program across the Lidsdale/Wallerawang region. The regional plan would address noise and management requirements for the WCS site. The letter indicated that the regional plan is due for submission by 21 February 2016. SSCS was not aware of the current status of the regional plan as this was being prepared by Centennial corporate. It is noted that WCS had engaged a noise consultant to conduct a noise assessment for conveyor OL-1 and the transfer point for OL-1 / OL-2 (Hatch, 2016) to further understand the issues and sound levels from these sources of noise. WCS and Centennial were considering the strategies provided in the report (Hatch, 2016) at the time of the site inspection. WCS reported on 15 March 2016 that revised noise modelling had just been received at this time and would support further investigations into appropriate noise controls. Given the exceedances noted above this condition was found to be non-compliant. Recommendations are made in the main report. A real-time noise monitoring unit is installed on Centennial owned land at Karrawatha Lane, close to NM4 and was installed in October 2015. The directional noise monitor (noise compass) was observed during the site inspection and uses multi-microphone array to monitor real-time noise from the conveyors (OL-1 and OL-2, the CHPP and the haul roads when operating). Attended monitoring is undertaken on a monthly basis. Shifts can be planned to manage potential noise issues by using a comparison of short-term meteorological forecasts with pre-prepared noise model on wind gummer binares to look up results for the modelled scenarios would allow for the management reported predictive monitoring was not operational at the time the haul roads were	Non Compliant (REC-2016- 16)	

Developme	nt Consent SSD-5579			
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation
3.9	 Noise Management Plan The Applicant shall prepare and implement a Noise Management Plan for the development to the satisfaction of the Director-General. This plan must: e) Be prepared in consultation with the EPA, and submitted to the Director-General for approval within 4 months of the date of this approval, unless otherwise agreed by the Director-General; f) Describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this consent; g) describe the proposed noise management system in detail; and h) Include a monitoring program that: e evaluates and reports on: the effectiveness of the on-site noise management system; compliance against the noise criteria in this consent; and compliance with the noise operating conditions; includes a program to calibrate and validate real-time noise monitoring results with attended monitoring results over time (so the real-time noise monitoring program can be used as a better indicator of compliance with the noise criteria and includes a protocol for identifying and notifying P&I and relevant stakeholders of any noise incidents. 	 Centennial (2014), Noise Management Plan Western Coal Services, July 2014. Letter – Centennial (2014), WCS Noise Management Plan, 4 August 2014. Letter – DP&E (2014), WCS (SSD-5579) Noise management Plan, 5 September 2014. Hatch (2016), Noise Assessment and Control Advice for Conveyor OL1 and Transfer Point OL1 to OL2, Ref: H350529-0000-07-124- 0001, Rev B. 	 Preparation e) The Noise Management Plan was approved by the Director-General on 15 September 2014 and was submitted for approval on 4 August 2014 (i.e. within 4 months of 4 April 2014). Section 1 notes the NMP was developed in consultation with the EPA; however, no evidence of consultation with the EPA was sighted during the audit. f) Section 5 of the NMP describes that mitigation measures will be implemented to ensure compliance with the noise criteria in Table 1; however, the specific mitigation measures to be employed were not clear. g) Section 5 describes the proposed noise management system. h) Section 5 includes a noise monitoring program. Implementation Noise management and mitigation measures were observed during the site inspection and the following is noted: 8. A real time monitoring unit was observed to have been installed to manage and monitor noise emissions from the site. Operational noise levels are measured continuously at a strategic location off- site (Karrawatha Lane) using the real time monitoring unit (Section 5.1.2). 9. Attended monitoring is undertaken monthly by an external consultant (Section 5.2). 10. Conveyor transfer points were clad. 11. Conveyor CL-01 was covered on the northern side – sighted. 13. Conveyor CL-02 covered on roof and northern side – sighted. 14. A noise barrier adjacent to CL-02 and approximately 1.3 km from Castlereagh Highway was sighted. The Noise Management Plan refers to 'mitigation measures' a number of times but does not specify what the mitigation measures are for the development, such as cladding and sound barriers. Given the exceedances noted in Condition 7, Schedule 3 above, implementation of the Noise Management Plan was found to be non-compliant. Recommendations are made in the main report. 	Non-compliant Recommendation Refer to REC-2016-18 (Section 5.5) Noting the Noise Management Plan may be superseded by a regional Centennial monitoring program.
3.10	BLASTING Restriction on Blasting The Applicant shall only carry out blasting on site to construct the Link Haul Road and only between 9 am and 5 pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the Director- General.	-	WCS management reported that no blasting is conducted at WCS. WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reject and tailings emplacement facility comprising a coal distribution network.	Not Activated
3.11	 Operating Conditions The Applicant shall: a) Implement best blasting management practice to: protect the safety of people in the surrounding area; protect public infrastructure and private property in the surrounding area from any damage; and minimise the dust and fume emissions of any blasting; b) Minimise the frequency and duration of any required road closures; c) Consult with, and obtain the approval of, the RMS for any blasts within 500 metres of the Castlereagh Highway; and d) Operate a suitable system to enable the public to get up-to-date information on the proposed blasting schedule on site, 	-	WCS management reported that no blasting is conducted at WCS. WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reject and tailings emplacement facility comprising a coal distribution network.	Not Activated

to the satisfaction of the Director-General.

Developme	nt Consent SSD-5579				
Condition No.	ondition o. Condition		Evidence Source	Comment / Finding	
Condition No. 3.12 3.13	Condition Odour The Applicant shall ensure that no offensemitted by the development. AIR QUALITY Air Quality Criteria The Applicant shall ensure that all reasonable employed so that particulate matter emissions criteria listed in Tables 4, 5 or 6 at any resident Table 4 - Long-term criteria for particulate reference Pollutant Total suspended particulate (TSP) matter Particulate matter < 10 μm (PM10)	ive odours, as defined u and feasible avoidance an generated by the develop ce on privately-owned lanc natter Averaging Period Annual Annual	d mitigation measures are ment do not exceed the definition of exceed t	Evidence Source Comment / Finding Site observation. WCS Community Complaints Register (April 2014 to December 2015). SLR Consulting Ambient Test Reports ~610.11391.00400-TR6, 610.11391.00400-TR1, 610.11391.00400-TR	 Comment / Finding No offensive odours were noted during the Site inspection. The WCS Community Complaints Register indicated that there were no odd for the period April 2014 to December 2015. Potential sources of significant dust emissions from the Site include: Unsealed/uncovered areas exposed to wind erosion including emplaced and stockpiles; Coal handling and dozer activities; Movement of vehicles on sealed and unsealed roads from general site Crushing, screening and preparation of product coal. To minimise dust emissions, the following measures were observed on-site, with those noted in the Air Quality Management Plan: Fixed sprinklers on the stockpile. Enclosure of conveyor transfer points. Coal reclaim from stockpiles via underground reclaim tunnel. Three quarter enclosed conveyors. Haul roads located off-site, although not in use at the time of the site inspected. Water cart(s) as required.
					 also noted that the site inspection was conducted on one wet day (4 Februar 2016), hence the site was not observed in very dry Other site observations included: Three deposition dust gauges (DG3, DG4 and DG5) are located at WC. One High Volume Air Sampler (HVAS, measuring both PM₁₀ and Total Particulates) located at Pine Dale Mine. One Tapered Element Oscillating Microbalance (TEOM) located in the Blackmans Flat. Assessment of Table 4 Long-term criteria for particulate matter follows: Data from 1 January 2015 to 31 December 2015 the TEOM rolling average TSP value was 27.7 µg/m³, below the HVAS annual avera 90 µg/m³. Data from 4 April 2014 to 30 December 2014 the rolling annual avera value was 18.8 µg/m³, below the annual average guideline of 90 µg. From 1 January 2015 to 31 December 2015 the TEOM rolling annual avera 90 µg/m³. Three the site is a statistic for the transmitter of the transmitter of the transmitter for the transmit

	Compliance Status & Recommendation
our complaints	Compliant
	Compliant
ment areas	(for one Depositional Dust Gauge)
activities, and , consistent	REC_2016-44 – In Consultation with relevant agencies, consider relocating DG3 to a location more representative of background conditions at that location should long- term criteria exceedances for deposited dust continue.
spection, were site inspection.	
pection. It is ary 2016) and conditions.	
S. Suspended vicinity of annual age guideline of	
erage TSP g/m ³ . ual average f 30 μg/m ³ . nual average 90 μg/m ³ .	

Evidence Source

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Condition

Condition No.

3.13

Table 5- Short-term criterion for particulate matter

Pollutant	Averaging Period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 6 - Long-term criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	^d Criterion
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 3 to 5:

- ^a Total impact (ie incremental increase in concentrations due to the development plus • background concentrations due to all other sources).
- ^b Incremental impact (ie incremental increase in concentrations due to the development 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.
- ^d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Director-General.
- ^e "Reasonable and feasible avoidance measures" includes, but is not limited to, the operational requirements in condition 17 to develop and implement a real-time air quality management system that ensures operational responses to the risks of exceedance of the criteria.

Comment / Finding

Assessment of Table 5 - Short-term criterion for particulate matter follows:

- The rolling annual average for 24 hour PM_{10} for the period 1 January 2015 to 31 December 2015 measured using TEMO was **11.1** μ g/m³, below the guideline of 50 μ g/m³; however, only 333 days of data was available.
- The rolling annual average for 24 hour PM₁₀ for the period 4 April 2014 to 30 • December 2014, using the HVAS, was **8.3** μ g/m³, below the guideline of 50 μ g/m³; however, only 333 days of data was available.

Assessment of Table 6 - Long-term criteria for deposited dust follows:

Location	Date	Result - g/m²/month	WCS Comments Note 1
DG3	June 2014	6.8	Slightly cloudy, bugs large # fine brown & brown/black dust
DG3	July 2014	16.6	Clear, bugs, plant m large # fine brown/gr coarse brown/black
DG3	August 2014	27.2	Slightly cloudy, bugs organics, very large brown/green/black & brown/green/black d
DG3	September 2014	45	Cloudy, bugs, plant r fine brown/green/bla coarse brown/green/
DG3	May 2015	9.0	Slightly cloudy, fine l coarse brown/black
DG3	June 2015	6.4	Clear, fine brown/gre brown/black dust
DG3	July 2015	5.4	Clear, fine brown/gre black dust
DG3	August 2015	6.5	Clear, fine brown/gre brown/black dust
DG3	September 2015	7.5	Clear, fine brown/gre brown dust
DG3	January 2016	8.6	-

The 12 month rolling average dust deposition was above the guideline at location DG3 for four months in 2014 and five months in 2015. The rolling average was above the guideline in January 2016. SSCS management reported that DG3 was located adjacent to a former dirt road that was sealed in late 2015. It is noted that no dust complaints were received between April 2014 and December 2015. Deposition dust samples for February 2016 were not available.

plant matter, very very large # course
atter, organics, very ey & very large # lust
, plant matter, # fine very large # coarse Jst
natter, very large # ck & very large # black dust
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Compliance Status & Recommendation

Developme	evelopment Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
			Laboratory test reports (UQMP) for the period 18 July 2014 to 8 December 2015 identified that mineral dust (soil or rock dust) was the predominant material identified in the exceedances at DG3 with content typically 70% to 90% of the sample. Coal was identified in sample exceedances on 8 December 2015 (10%), 27 October 2015 (5%), 26 August 2014 (5%) and 18 July 2014 (10%).		
			DG3 is located approximately 1 km south of the WCS operations across forested area and rural paddocks. WCS management reported that DG3 is located approximately 15 meters from Brays Lane and that this was an unsealed road until November 2015. WCS management also reported that DG3 is located in the vicinity of cattle holding yards approximately 100 meters from the gauge. Auditors noted from publicly available online aerial imagery that DG3 is located approximately 200 m to the north of receiver B17, as identified in the EIS (p.116).		
			Given the low coal percentage results and high mineral dust results provided in the laboratory test reports (UQMP) this condition was found to be compliant noting that that some elevated results are potentially overstated for DG3 due to other (non-coal dust related) sources.		
3.14	Mine-owned Land The Applicant shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the development do not cause exceedances of the criteria in Tables 4, 5 and 6 at any occupied residence on mine-owned land unless:	WCS Community Complaints Register (April 2014 to December 2015).	SSCS management reported this condition had not been triggered. The WCS Community Complaints Register indicated that there were no dust/air quality complaints for the period April 2014 to December 2015.	Not Activated	
	 a) the tenant and landowner (if the residence is owned by another mining or power generation company) have been notified of any health risks associated with such exceedances in accordance with the notification requirements under Schedule 4 of this consent; b) the tenant of any land owned by the Applicant can terminate their tenancy agreement without penalty at any time, subject to giving reasonable notice; 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 or landowner (if the residence is owned by another mining or power generation company); d) air quality monitoring is regularly undertaken to inform the tenant or landowner (if the residence is owned by another mining or power generation company) of the actual particulate emissions at the residence; and e) data from this monitoring is presented to the tenant or landowner (if the residence is owned by another mining or power generation company) of the actual particulate emissions at the residence; and e) data from this monitoring is presented to the tenant or landowner (if the residence is owned by another mining or power generation company) in making informed decisions on health risks associated with occupying the property, 				

Appendix A: Compliance Tables

Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding	

3.15 Air Quality Acquisition Criteria

If particulate matter emissions generated by the development exceed the criteria, or contribute to an exceedance of the relevant cumulative criteria, in Tables 7, 8 or 9, at any residence on privatelyowned land, then upon receiving a written request for acquisition from the landowner the Applicant shall acquire the land in accordance with the procedures in conditions 5-6 of Schedule 4.

Table 7- Long term land acquisition criteria for particulate matter

Pollutant	Averaging Period	^d Criterion
Total suspended particulate (TSP) matter	Annual	^a 90 μg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 8 - Short term land acquisition criteria for particulate matter

Pollutant	Averaging Period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 150 μg/m ³
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 μg/m ³

Table 9 - Long term land acquisition criteria for deposited dust

Pollutant	Average Period	Maximum increase in deposited dust level	Maximum total deposited dust level
c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Notes to Tables 7-9:

- a) Total impact (ie incremental increase in concentrations due to the development plus background concentrations due to all other sources);
- Incremental impact (ie incremental increase in concentrations due to the development on its b) 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;
- d) Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, or any other activity agreed by the Director-General.

MCW Environmental

No written requests were reported by WCS management to have been received, hence

this condition has not been triggered.

Compliance Status & Recommendation

Not Activated

Development Consent SSD-5579			
Condition No.	Condition	Evidence Source	Comment / Finding
3.16	 Operating Conditions The Applicant shall: Implement best practice management to minimise the off-site odour, fume and dust emissions of the development; Implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site; Minimise the surface disturbance of the site; Minimise any visible off-site air pollution generated by the development; 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 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 Director-General. 	 Site observations. Interview(s). Pacific Environment Pty Ltd (2014), Western Coal Services Air Quality Management Plan, 30 July 2014, Ref: 08866. Dust Risk Report 00:00 03/01/2016 - 12:00 13/01/2016 - 12:00 15/01/2016. WCS Community Complaints Register (April 2014 to December 2015). Annual Daily 24-hr Summaries for teom.xlsx – 1 January to 31 December 2015. 	 Due to the nature of the site, odour and fumes are not considered to the site. The following is noted relating to dust management: a) Daily weather forecasting predictions are conducted using the Dumain source of dust is from disturbed areas, haul roads, internal of The main control is the use of a water cart on unsealed areas (i.e. management reported there was minimal dust generated from store generally has a high moisture content. A large area of the WCS is be handed back to Energy Australia which will therefore reduce the land that WCS has to manage. It is noted that the site inspection one wet day and one wet/dry day therefore the auditors did not of a long dry period. b) Plant with GHG emissions were reported to be operated as and w (i.e. motors and trippers) have variable speed drives installed. Por at the WCS include combustion of diesel, use of oil, grease and e Environment, p.23). The Air Quality Management Plan (p.23) proconcerning the GHG related monitoring that will be completed at the generally be assessed annually through a review of invoices (Pac p.23). No targets for GHG emissions were set in the Air Quality MC) Sequential clearance for the stages of the REA (i.e. Stage 1, Stage conducted. Rehabilitation of drainage channels and pump pit are observed during the site inspection. Some areas of the site, such area, had not been progressively rehabilitated / seeded to preven the time of the inspection construction works had just been complexistered that the extent of disturbance should be regularly revidisturbed areas. d) WCS management consider that unsealed roads and traffic moves source of potential dust emissions although SSCS management to been no know off-site dust emissions and no complaints have beer concerning dust. Evidence of minor windblown dust was from intwere observed during the site inspection (day two); however, it withat the dust did not appear to leave the site. The site shut-down wind day. e) Sprinklers were sight

be a key risk at the

ust Risk Report. The roads and vehicles. e., roads). WCS ockpiles as ROM coal site (Area A) is due to he area of disturbed n was conducted on bserve the site during

when required. Plant otential GHG sources electricity (Pacific ovides details WCS noting this will cific, 2014, Table 7.3, Management Plan/ ge 2 etc.) is being ound 'A' Pit were the overburden nt wind erosion. At leted. It is iewed to minimise

ement are the main reported there have en received ternal haul roads as localised noted n during one strong

cussed at the daily indstorm in late 2015 he TEOM monitoring e continuous PM₁₀ t term particulate

Compliance Status & Recommendation

Compliant

Recommendation

REC-2016-23 - Disturbed areas that aren't required for everyday use should be progressively rehabilitated.

REC-2016-24 - Consider setting targets to demonstrate all "reasonable and feasible measures to minimise the release of GHG emissions from the site are considered.

REC-2016-25 - Implement a program to regularly review the extent of disturbed areas to ensure all disturbed areas not required for production are rehabilitated or stabilised.

Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding	
3.17	 Air Quality Management Plan The Applicant shall prepare and implement an Air Quality & Greenhouse Gas Management Plan for the development to the satisfaction of the Director-General. This plan must: a) Be prepared in consultation with the EPA, and submitted to the Director-General for approval within 4 months of the date of this consent, unless otherwise agreed by the Director-General; b) Describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this consent; c) Describe the proposed air quality management system; and d) Include an air quality monitoring program that: uses a combination of at least one tapered element oscillating microbalance air quality monitor, sited in the vicinity of Blackmans Flat, and supplementary monitors to evaluate the performance of the development against the air quality criteria in this consent; adequately supports the proactive and reactive air quality management system; and evaluates and reports on: the effectiveness of the air quality management system; and compliance with the air quality incident, and includes a protocol for identifying and notifying P&I and relevant stakeholders of any air quality incidents. 	 Letter - Centennial (2014), WCS Air Quality Management Plan, 31 July 2014 (EPA). Letter - Centennial (2014), WCS Air Quality Management Plan, 4 August 2014 (DP&E). Pacific Environment Pty Ltd (2014), Western Coal Services Air Quality Management Plan, 30 July 2014, Ref: 08866. Dust Risk Report 00:00 01/01/2016 - 12:00 03/01/2016 Dust Risk Report 00:00 13/01/2016 - 12:00 15/01/2016 	 Preparation of the Plan a) WCS management reported that the AQMP was approved by the 24 April 2015; however, no evidence to confirm the approval was of consultation with the EPA was sighted in the form of a letter da noting the inclusion of the draft AQMP for comment. The AQMP Director-General on 31 July 2014. a) The AQMP described the measures that would be implemented to with the relevant conditions of the Development Consent. The plac concerning Greenhouse Gas (GHG) emissions noting that Scope 5,324 tonnes CO₂-e per year and Scope 2 emissions are 12,535 if year. The plan notes that's GHG monitoring will be undertaken in requirements of the <i>National Greenhouse and Energy Reporting Regulations</i> b) Section 7 included an air quality monitoring program that used a columetric sampling and dust deposition gauges to evaluate the provolumetric sampling and dust deposition gauges to evaluate the provolumetric sampling and dust deposition gauges to evaluate the provolumetric sampling and consent. c) Section 7 included monitoring requirements including at least one Oscillating Microbalance (TEOM) air quality monitor sited in the vision flat. Section 7.3.1 noted how the monitoring will support proactiving quality management. Section 8 noted how the monitoring program reports on the effectiveness of the air quality management system with the air quality operating conditions. Sections 8, 9 and 10 def an air quality incident, and includes a protocol for identifying and rother relevant stakeholders. Implementation of the Plan Dust Deposition Dust Deposition Dust Deposition Gauges (DGs) record dust fallout from dust emission A network of three DGs are maintained around the site to assess deportion use basis with Development Consent conditions and are identian dDG5. Monitoring results were sighted. 	

PM₁₀ and TSP HVAS

The HVAS provides real-time measurement of airborne PM_{10} concentration levels and TSP. Real-time PM_{10} concentrations are reported online, along with real-time meteorological data such as wind speed and direction, for proactive dust management. Monitoring data is manually downloaded on a monthly basis for data validation purposes. The TEOM also provides PM_{10} and operates continuously.

Dust Risk Reports were sighted dated 1 and 13 January 2016. The reports provide predications for dust events for day and night shifts in accordance with Section 8.1 of the AQMP. Events are ranked as Low, Medium, High and Extreme.

Compliant

he Director-General on as sighted. Evidence dated 31 July 2014 IP was submitted to the

d to ensure compliance plan includes sections pe 1 emissions are 5 tonnes CO_2 -e per in accordance with the *bg Act 2007 (NGER Act) ns 2008.* a combination of e performance of the

nissions. Additionally, with the relevant

ne Tapered Element e vicinity of Blackman's ctive and reactive air gram evaluates and tem and compliance define what constitutes ad notifying DP&E and

on sources in the area.

eposited matter on a intified as DG3, DG4
Developme	Development Consent SSD-5579						
Condition No.	Condition	Evidence Source	Comment / Finding				
3.18	 METEOROLOGICAL MONITORING For the life of the development, the Applicant shall 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, unless a suitable alternative is approved by the Director-General following consultation with the EPA. 	 Pacific Environment Pty Ltd (2014), Western Coal Services Air Quality Management Plan, 30 July 2014, Ref: 08866. Site observations. ALS Website (2015) Lidsdale Mine LDP004, Available at: https://portal.alsglobal.com/we b.htm [Accessed 27/01/2016 at 14:25hrs] Weather Station Calibration Forms – 17/07/2014. Weather Station Weather Station Field Check Annual Physical Screening, 09/07/2015. Weather Station Field Check, 09/07/2015. RPS (2013), Environmental Impact Statement Western Coal Services Project, July 2103, Ref: PR110910; Final / July 2013. 	 The Pine Dale Automatic Weather Station (AWS) was used for the didata in the EIS (RPS, 2013). The WCS Met Station is capable of measuring the following parameter. Temperature at 2 m and 10 m Vector and Scalar Wind Speed at 10 m Vector and Scalar Wind Direction at 10 m Daily Rainfall Solar Radiation Sigma Theta The weather station was installed on 8 July 2015 and tested on 9 July on Karrawatha Road. It was commissioned in teledata on 11 July 20 station field check report dated 9 July 2015 stated 'The meteorologica requirements of the Approved Methods for the Sampling and Analysis NSW (2007)'. Calibration certificates dated 17 July 2014 for weather station comport for review. A Weather Station Field Check form dated 9 July 2015 stated "The meteorologica pollutants in NSW (2007)". 				

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spersion modelling

Compliant

ters:

ly 2015. It is located 015. A weather cal station meets the sis of Air Pollutants in

onents were available

meteorological station and Analysis of Air

Development Consent SSD-5579							
Condition No.	Condition	Ev	idence Source	Con	nment / Finding		
3.19	SOIL AND WATER	•	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. 	WCS does not extract groundwater	S does not extract groundwater or utilise I	or utilise harvestable water rights	
	Water Supply			water extraction licences are held for the site. Water is man dirty water run-off and reuse for processing purposes and t			
	The Applicant shall ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations on site to match its available water supply.	August 2014, Ref: S167I/011e.		facilities within the Washery.			
			Water Sources				
	Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required			Pri	mary	Treated and Recycled	
	to obtain the necessary water licences for the development			• • •	Rain interception. Run-off from undisturbed areas entering the lease area or in pit rainfall inflows. Run-off from rehabilitated areas. Municipal water supply (potable).	 Site stormwater from rehabilitated areas w pollution / sediment Dewatering sump put the open cut area (c Water generated from disposal system. 	

(Source: RPS, 2014, Table 6.2, p.31)

The Site's Water Management Plan (RPS, 2014, p.42) states that "Taking into consideration the upgraded Washery, the total water demand for the SCSS site is 2.7 ML/d (2.5 ML/d for the Washery and 0.2 ML/d for dust suppression). The water is proposed to be supplied from the following sources:

- 25% of the supply is pumped from Cooks Dam, 60% of which is worked water transferred from the Washery Sediment Dam via the implemented pipe link, which is re-circulated to the system;
- 40% of the supply comes from the Washery Sediment Dam, of which 40% is re-٠ circulated water from the clarifier overflow and 60% is transferred from the new REA Sediment Dam, which collects the run-off from the new REA;
- 17% of the water supply is re-circulated water from the press belt filter; and
- 18% of the water is re-circulated worked water from the Stockpile Sediment Dam. •

In total, the recirculated water adds up to 50% of the total water demand of the SCSS site".

Given the washery is now not planned to go ahead, the above now does not apply and a new site water balance is to be developed by GHD.

The new REA Sediment Dam is an important element in the site's water supply during prolonged dry periods the site may have to use stored water to supply the CHPP.

In the event that the water demand cannot be met by on-site sources, surplus water sources exist at the Angus Place and Springvale Collieries. This water will be made available to make up any shortfall as required.

RPS (2014, p.42) note that "The site water balance as presented in the EIS (Centennial Coal 2013b) has been amended to reflect the influence of the Cooks Dam inflows which have been identified since the original surface water assessment (RPS 2013b) was commissioned. The contribution of the inflows to the site water balance has been determined by first undertaking a water balance assessment for Cooks Dam".

Refer to EPL Compliance assessment Condition L1.1.

3.20 Water Pollution

> Unless an EPL authorises otherwise, the Applicant shall comply with Section 120 of the POEO Act.

for water supply. No ough the collection of sing water recycling

Compliance Status & Recommendation

Compliant

m disturbed and partly which enters the main t control ponds. oumps at the base of currently not in use). om the washery reject

Water intercepted in DML and Cooks Dam from run-off from the old open cut areas and seepage from the old underground workings and open cut overburden.

Not Verified

REC-2016-26 – If required by the EPA, or as part of establishing a separate EPL for WCS, modify licence limits for discharges from LDP-006 as appropriate.

Development Consent SSD-5579							
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation			
3.21	Remediation of Soil Contamination Within 4 months of the date of this consent, unless otherwise agreed by the Director- General, the Applicant shall commence a Phase 2 Contamination Assessment for the SCSS.	 AECOM (2014), Targeted Phase 2 Environmental Site Assessment, 22 October 2014, Ref: 60326953. Email – Centennial (2015), Phase 2 Environmental Site Assessment at Western Coal Services [Sent: 02/06/2015 @ 3:58pm] to EPA. ALS Website (2015) Lidsdale Mine LDP004, Available at: https://portal.alsglobal.com/we b.htm [Accessed 27/01/2016 at 14:25hrs] Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.Xls – 08/01/2015 to 03/12/2015. 	 A Targeted Phase 2 Environmental Site Assessment (ESA) was conducted at the site between June and August 2014 (AECOM, 2014) i.e. within four months of April 2014.). AECOM (2014, p.III) identified that "Based on the field observations and review of analytical data, no gross contamination was identified that would preclude the proposed development without first initiating remedial activities". The following recommendations were made in the Phase 2 ESA: <i>"Continue monthly surface water monitoring at the Site.</i> <i>Further investigation of heavy metal contamination of sediments in Wangcol Creek, with particular regard to assessing sediment quality far up stream and far down stream of the Site.</i> <i>Improve housekeeping practices to minimise spills in and around the oil store"</i> (AECOM, 2014, pIII). Surface water monitoring is conducted at the site and improvements to the oil store were observed during the site inspection. At the time of the site inspection further investigation of heavy metal contamination of sediments in Wangcol Creek, had not been conducted. 	Compliant REC-2016-27 – Discuss with the EPA as to whether an investigation (far up stream and far down stream) into heavy metal contamination of sediments in Wangcol Creek of WCS is warranted.			
3.22	The Applicant shall manage the remediation of the SCSS and the Kerosene Vale Coal Stockpile Area to the satisfaction of the EPA.	 AECOM (2014), Targeted Phase 2 Environmental Site Assessment, 22 October 2014, Ref: 60326953. Email – Centennial (2015), Phase 2 Environmental Site Assessment at Western Coal Services [Sent: 02/06/2015 @ 3:58pm] to EPA. Site observations. 	The Phase 2 Contamination Assessment (AECOM, 2014) was sent to the EPA on 2 June 2015 (Centennial, 2015). Kerosene Vale was not being used to stockpile coal at the time of the site inspection and the Phase 2 Contamination Assessment did not appear to include Kerosene Vale in the scope of works. WCS management reported there had been no instruction from the EPA concerning remediation at Kerosene Vale during the audit period. A new oil store had been constructed at the site following completion of the Phase 2 Contamination Assessment. AECOM (2014, p.III) stated that "based on the field observations and review of analytical data, no gross contamination was identified that would preclude the proposed development without first initiating remedial activities". WCS provided email correspondence dated 2 March 2016 indicating Centennial were communicating with the EPA regarding actions required of the Phase 2 contamination assessments discussed above in Condition 21, Schedule 3. Given there was no evidence to demonstrate remediation at the site and Kerosene Vale had been undertaken to the satisfaction of the EPA this condition was considered to be not verified.	Not Verified			

Developme	Development Consent SSD-5579								
Condition No.	Condition		Evi	idence Source	Comment / Find	ng			
3.23	The Applicant shall comply with the performance measures in Table 10 to the satisfaction of the Director-General. Table 10 - Water Management Performance Measures	•	RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e.	One exceedance of EPL 3607 pH criteria was recorded at L 2014 (6.46). WCS noted that the September 2014 exceeda rainfall, 50.5mm that resulted in the discharge of surface was emplacement areas. Centennial reported the exceedance in					
	Feature	Performance Measure	•	 Site observations. ALS Website (2016) WCS, LDP-006, Available at: https://portal.alsglobal.com/we b.htm [Accessed 27/01/2016 at 14:25hrs] Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.XIs – 08/01/2015 to 03/12/2015. EPL 3607 Annual Return ALS (2016), Springvale LDP006 Rainfall in MM [ALS Portal], 27 January 2016. GHD (2016), Lambert Gully REA Operation and Maintenance Manual for REA and A Pit Maintenance 	though rainfall crite	teria of 56 mm as specified in EPL 3607 Condition I was no pH exceedance for 2015 from the data rev			
	Potable Water	Minimise the use of potable water for purposes where non-potable water is acceptable			LDP-006, Available at: C https://portal.alsglobal.com/we S b.htm [Accessed 27/01/2016 at t 14:05brc]	03/12/2015). The EPL range for pH at LDP-006 is 6.5 to 8.5. surface water flow over reject emplacement areas by diverting these areas, maintaining freeboard in the Main Sediment Pon runoff to Cooks Dam rather than LDP-006			
	Construction and operation	 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 and Volume 2C –Unsealed Roads, or its latest version Design, install and maintain all works within 40 m of watercourses generally in accordance with the Guidelines for Controlled Activities on Waterfront Land (DPI 2012), or its latest version Design, installation and maintenance of 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 result of 148 Ne criteria of 50 NTU mg/L was recorde considered to be concentration limit deemed not to ap dams) occurs solit the Washery and consecutive 5 day discharge was 61	ephelometric Turbidity Units (NTU) was recorded ag on 21 April 2015 at LDP-006. During the same ev ed against an EPL 3607 criteria of 30 mg/L. These exceedances as Condition L2.5 of EPL 3607 states its stipulated by condition L2.1/L2.4 for EPA identific ply when the discharge from the stormwater contro- ely as a result of rainfall measured at the premises Stockpile Sediment dams, a total of 56 millimetres (period'). Rainfall recorded at LDP-006 in the five of mm (ALS, 2016).			
	Sediment Dams	Design, install and maintain dams generally in accordance with Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries, or its latest version	•		2016 (ALS, 2016). WCS management reported that there were no discharges from LE Environmental Monitoring Reports April to December 2014 and Jar indicated there had been no discharge from LDP-007				
	Clean water diversions & storage infrastructure	 Design, install and maintain the clean water system to capture and convey the 100 year ARI flood, as far as is reasonable and feasible Maximise diversion of clean water around disturbed areas, as far as is reasonable and feasible 		Upgrade, February 2016, 21/24377.	The following provides comments on the performance measure				
	storage initiastructure				Feature	MCW Environmental Comment			
	Mine-water storages	- Design, install and maintain the mine-water storage infrastructure to	ure to		Potable Water	Potable water is supplied to the site for the bath house and for o			
		 store all runoff from a 95 percentile 5 day rain event Prevent seepage from the DML and Cooks Dams to the surface, as far as is reasonable and feasible 			Construction and operation	A full assessment against the performance measures was not on Sediment and erosion controls were observed during the site in			

Chemical and

hydrocarbon storage

Aquatic and riparian

affected sections of Wangcol and Lamberts

Gully Creeks

ecosystems, including

Chemical and hydrocarbon products to be stored in bunded areas in

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

accordance with the relevant Australian Standards

its latest version

Maintain or improve baseline channel stability

on 10 September the result of high the reject 4 Annual Return, even L2.5 was not viewed (08/01/2015 to mitigated the issue of ce water flows from intercepting surface

gainst an EPL 3607 vent a TSS result of 63 results were not s that "The ication point 6 is ol structures (sediment which exceeds: a) for of rainfall over any days before the

P-006 on 23 January

P-007. The monthly ary to January 2016

ined in Table 10.

Volume 1, Volume 2A - Installation of Services and Volume.

construction material and internal and external slopes.

main body of this audit report.

MOP

during the audit.

Sediment Dams

drinking water.

conducted.

spection in the form of rock dams and straw bales (LDP-006). MCW Environmental did not assess the site according to the series Managing Urban Stormwater: Soils and Construction including

The main area of construction completed was the REA. Drainage lines in the vicinity of the REA had generally been grassed and stabilised. This is discussed in more detail in the

The Co-Disposal Ponds were due to be decommissioned shortly after the site inspection and WCS management reported that they would be rehabilitated in accordance with the

'A' Pit was ready to receive decant water from the new REA when at the time of the site inspection. An Operations and Maintenance Manual (GHD, 2016) provided details concerning construction and operation of the new REA as well as "A' Pit. GHD (2016, p.11) discuss the upgrades to 'A" Pit, including, but not limited to bund crest levels,

Evidence that sediment dams had been constructed in general accordance with the series Managing Urban Stormwater: Soils and Construction including Volume 1, Volume 2A -Installation of Services and Volume 2C –Unsealed Roads was not confirmed in detail

Compliance Status & Recommendation

Not Verified

REC-2016-28 – Update the Water Management Plan to include a TARP for Lamberts Gully in accordance with ANZECC 2000 and Using the ANZECC Guidelines and Water Quality Objectives in NSW procedures (DECC 2006), or its latest version.

REC-2016-29 – Ensure the revised Water Management Plan includes strategies and measures for the diversion of clean and dirty water around disturbed areas, as far as is reasonable and feasible.

REC-2016-30 - Revise the existing site inspection to verify compliance with Managing Urban Stormwater: Soils and Construction – Volume 1 and Volume 2E Mines and Quarries, or its latest version.

Developme	Development Consent SSD-5579					
Condition No.	Condition	Evidence Source	Comment / Finding			
	·		Continued:			
			Feature	MCW Environmental Commer		
			Clean water diversions & storage infrastructure	 WCS management reported that the design of diversion drain ARI flood event could be conveyed around disturbed areas to was not verified. A diversion drain was observed around the new REA was repsuch that 1 in a 100 year ARI flood event could be conveyed f around the REA into a site drainage line. The drainage line division of the site preventing water from off (MOP, p.25). Observations from the site inspection indicated that there were dirty water mixed, for example from the catchment upstream of management reported at the time of the site inspection that a Management Plan was in the process of being prepared by G would consider if diverting clean water would be reasonable a 		
			Mine-water storages	 Water captured on-site and surplus to requirements (and hold at LDP-006. Discharges are monitored in accordance with EP note that "The catchment of the DML and Cooks Dams is sub from Mount Piper Power Station and a Waste Disposal Facility City Council. This should be understood and trends monitored waste disposal area grow in size". Stage 1 of the new REA sediment dam had been completed as sign-off by qualified engineer at the time of the site inspection dam (Stage 1, 2 and 3) covers an area of approximately 75 ha with a total storage capacity of 15 ML. 'A' Pit has been enlarge holding pond to the new REA. 'A' Pit will form the holding port water. Currently this water reports to the underground working eastern edge of the 'A' Pit. A Contingency Decant has been case. This water would be pumped to Cooks Dam for return automatic level controlled electric pump transfers excess wate the DML dam. The decant pumps are installed at the north ead discharge flood waters up to the 1:100 ARI storm within a max Operations Manual (GHD, 2016, p.14) notes that "For flood en capacity to transfer up to 75L/s to the A pit. In normal operatii set to approximately 100-200mm maximum decant pond (wat an inflow to the decant chamber of ranging from 15-75L/s" 		

nts

ns is such that a 100-year external catchments. This

ported to have been designed from the external catchments verts water into drainage fsite draining into the REA

re places where clean and of the Sediment Dam. WCS revised Site Water HD and the revised plan and feasible.

ding capacity), is discharged PL 3607. RPS (2014, p.33) oject to future ash placement ity to be operated by Lithgow d as the ash placement and

and was awaiting formal . The new REA sediment a and has been modelled ged to act as a sediment and for supernatant and storm ngs via connection at the constructed should this flow n or use in the washery. An ter from the Cooks dam into ast corner of 'A' Pit and will ximum 14 days. The REA vents, the pump/siphon I be used in Stage 1 having a ion the intake lid level will be ter) depth. This will produce

Developme	Development Consent SSD-5579					
Condition No.	Condition	Evidence Source	Comment / Finding			
			Continued:			
			Feature	MCW Environmental Comment		
			Chemical and hydrocarbon storage	RPS (2014, p.24) note that "As an interim management measu inflows, approximately 7.4 ML/day of water is transferred from 0 this transfer has resulted in a general increase in DML Dam was increased water levels, seepage has been noted along the Cass to DML Dam. In accordance with Condition 23 of the Consent 0 required to minimise seepage from DML and Cooks Dams to the reasonable and feasible. To this end, Centennial has commissis the causes of the seepage including an assessment of manage options. The investigation is currently ongoing". As noted above Management Plan was in the process of being developed at the inspection. MCW Environmental understands that the new revi Plan will address the management of seepage including an ass and remedial options. The area of seepage was not inspected Chemical and hydrocarbon products were observed to be store containment during the site inspection, such as at the newly bu This store contained bunded cabinets. A full assessment again AS1940: Storage and Handling of Flammable and Combustible conducted as part of this audit.		
			Aquatic and riparian ecosystems, including affected sections of Wangcol and Lamberts Gully Creeks	Channel stability is maintained through the implementation of e controls. Controls were observed during the site inspection. Si are detailed in the WMP (RPS, 2014) that include a TARP for N A TARP for Lamberts Gully was not included in the WMP (RPS)		
			EPL 3607 rainfall applied to exceed	I criteria of 56 millimetres of rainfall over any consect dances of EPL criteria noted above.		
			Given a revised V time of the site in findings of the rev condition was con	Water Management Plan was in the process of bein spection and many of the features required were de vised Water Management Plan, such as diversion o nsidered not verified.		

It is noted that it was considered beyond the scope of this audit to assess compliance with the technical requirements of these performance measures. MCW Environmental auditors are not water specialists and have not assessed all data detailed above nor assessed all potential contaminant sources on site.

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sure for the Cooks Dam in Cooks Dam to DML Dam, water levels. As a result of the astlereagh Highway adjacent t Conditions, Centennial are the surface, as far as is assoned an investigation into gement and remedial ove a revised Water he time of the site evised Water Management assessment of management d during the audit.

red with secondary puilt oil store at the CHPP. ainst the requirements of ple Liquids was not

erosion and sediment Site specific trigger values Neubecks (Wangcol) Creek. S, 2014).

ecutive 5 day period

ng developed at the lependent upon the of clean water, this

Developme	Development Consent SSD-5579												
Condition No.	Condition	Evidence Source	Comment / Finding										
3.24	 Water Management Plan The Applicant shall prepare and implement a Water Management Plan for the development to the satisfaction of the Director-General. This plan must: Be prepared in consultation with the EPA, SCA, NOW, LCC, Forestry Corporation of NSW and Energy Australia by suitably qualified and experienced person/s whose appointment has been approved by the Director-General; Be submitted to the Director-General for approval within 4 months of the date of this consent, unless otherwise agreed by the Director-General; and Include a: Site Water Balance, that: includes details of: 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 minimise potable water use and to re-use and recycle water; 	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter – Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter – Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter – DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email – Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 08:03am 	 Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter – Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter – Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter – DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email – Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 08:03am. 	 Nr S (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter – Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter – Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter – DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email – Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 08:03am 	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter – Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter – Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter – DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email – Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter – Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter – Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter – DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email – Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 08:03am 	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter – Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter – Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter – DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email – Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter - Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter - Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter - DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email - Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter - Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter - Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter - DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email - Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter – Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter – Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter – DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email – Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Letter – Centennial (2014) Western Coal Services Water Management Plan (WCS DA SSD-5579), 4 August 2014 [to DP&E]. Letter – Centennial (2014) WCS Water Management Plan Consultant Approval, 15 April 2014. Letter – DP&E (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email – Centennial (2014), WCS Water Management Plan (Schedule 3, Condition 24), 15 April 2014. Email – Centennial (2014), WCS Water Management Plan to DRE, 29/07/2014 @ 	 Preparation A Water Management Plan (RPS, 2014) was prepared in August 2014 Management Plan has yet to be approved by the Director-General. W reported that they were in the process of reviewing and updating the W Plan as it was prepared on the assumption that a second washery wou WCS management reported that a second washery was unlikely to be therefore the plan and water balance needed to be updated to better r operations and layout. c) Emails dated 29 July 2014 from Centennial to DRE, Energy Austr Forests, LCC and the SCA were issued along with the WMP require comments concerning the WMP. Signed letters to the above part sighted. A letter from Centennial to DP&E dated 15 April 2014 water approval from the Director-General for two RPS Australia Pty Ltd Approval from the DP&E for the two RPS consultants to prepare to provided on 15 April 2014. d) The WMP was submitted to DP&E on 4 August 2014. Approval of pending at the time of the site inspection. e) The WMP includes the following: 	A. The Water CS management Vater Management uld be constructed. constructed and eflect the site's alia, the EPA, NSW esting feedback and ies were also as sighted requesting to prepare the WMP. he WMP was f the WMP was
	 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: clean water diversion systems; clean water diversion systems; detailed plans, including design objectives and performance criteria for: design and management for the emplacement of coal reject materials and potential acid-forming or sulphate-generating materials; reinstatement of sodic and dispersible soils; reinstatement of sodic and dispersible soils; reinstatement of appropriate drainage lines on the rehabilitated areas of the site; and control of any potential water pollution from the rehabilitated areas of the site; SCSS water management system;	 Email – Centennial (2014), WCS Water Management Plan to Energy Australia, 29/07/2014 @ 08:06am. Email – Centennial (2014), WCS Water Management Plan to NSW Forests, 29/07/2014 @ 08:09am. Email – Centennial (2014), WCS Water Management Plan to LCC, 29/07/2014 @ 08:10am 	 Site Water Balance, that: includes details of: 	6.1, 7.2, 7.3 6, 7, 11.3 7.2 12.3 7.2									
		 Email – Centennial (2014), WCS Water Management Plan to thee Sydney Catchment Authority (SCA), 29/07/2014 @ 08:14am. Email – DRE (2014), Western Coal Services Water Management Plan to Centennial, 04/08/2014 @ 11:22am. 		9 6 6.1 6.3 6.8									
			 detailed plans, including design objectives and performance criteria for: design and management for the emplacement of coal reject materials and potential acid-forming or sulphate-generating materials; management of sodic and dispersible soils; reinstatement of appropriate drainage lines on the rehabilitated areas of the site; and control of any potential water pollution from the rehabilitated areas of the site; a program to monitor and report on: effectiveness of the WCS water management system; and surface water flows and quality in the watercourses potentially affected by the development; and 	 6.4 6.4 11.3 6.2, 10, 11 10, 11, 12 10.2, 11, 12 									

Not Verified (Preparation)

Development Consent SSD-5579							
Condition No.	Condition	Evidence Source	Comment / Finding				
3.24	 Groundwater Management Plan that includes: 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 groundwate bores; groundwater impact assessment criteria including trigger levels fo investigating any potentially adverse groundwater impacts; a program to monitor and report on: groundwater inflows to former open cut pits; the seepage/leachate from water storages, emplacements of power station ash and/or coal rejects, and former open cut voids: and former open cut voids: and former open cut voids: and former open cut voids: 		Requirement - reporting procedures for the results of the monitoring program; and - a plan to respond to any exceedences of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the development • Groundwater Management Plan that includes: - detailed baseline data of groundwater levels, yield and quality on	Section of WMP 12 11			
 a background changes in groundwater yield/quality against changes induced by the development; and impacts of the development on: 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 exceedences of the performance criteria; and protocol that has been prepared in consultation with the owners of nearby power generation or mining developments to: minimise cumulative water quality impacts; review opportunities for water sharing/water transfers between these developments; co-cordinate water quality monitoring programs as far as practicable; undertake joint investigations/studies in relation to complaints/exceedences of trigger levels where cumulative impacts are considered likely; and co-ordinate modelling programs for validation, recalibration and re-running of groundwater and surface water models. 	 background changes in groundwater yield/quality against changes induced by the development; and impacts of the development on: 		 the WCS 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; 	10.1, 11			
	,	 a program to monitor and report on: groundwater inflows to former open cut pits; the seepage/leachate from water storages, emplacements of power station ash and/or coal rejects, and former open cut voids; background changes in groundwater yield/quality against changes induced by the development; and impacts of the development on: 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 exceedences of the performance criteria; and 	3.6, 10.1, 11, 12 3.6, 10.1, 11, 12 3.6, 10.1, 11, 12 10.1, 11 5, 10.1, 11, 12 5.3, 10.1, 11, 12 5.7, 10.1, 11, 12 10, 12.3 11				
	 Calibration and re-running of groundwater and surface water models. Note: The protocol can be developed in stages and will need to be subject to ongoing review, dependent upon the determination of, and commencement of, other mining and/or power generation developments in the area. 		 protocol that has been prepared in consultation with the owners of nearby power generation or mining developments to: 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; undertake joint investigations/studies in relation to complaints/exceedences 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. 	12.4			

While the Water Management Plan has been submitted to the DP&E, there has been no approval of the plan, hence WCS cannot demonstrate satisfaction of the Plan by the Director General as required of the condition. Given this, the compliance status of the condition is considered Not Verified.

Compliance Status
Recommendation

Developme	Development Consent SSD-5579							
Condition No.	Condition	Evi	idence Source	Comment / Finding				
3.24 cont'd		• • • • • • • • • • • • • • • • • • • •	ALS Website (2016) WCS, LDP-006, Available at: https://portal.alsglobal.com/we b.htm [Accessed 27/01/2016 at 14:25hrs] Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.XIs – 08/01/2015 to 03/12/2015. EPL 3607 Annual Return ALS (2016), Springvale LDP006 Rainfall in MM [ALS Portal], 27 January 2016. ALS Coal Services December 2015 - 24005453.XIs. ALS Coal Services November 2015 - 24005403.XIs ALS Coal Services November 2014 - 24005040.XIs. ALS Coal Services November 2014 - 24004999.XIs. April 2014 to October 2014 Water.XIs.	 Implementation Ref to Condition 23, Schedule 3 for comments concerning compliance implementation of water management performance measures. From the data reviewed (ALS, 2015, Centennial Environmental Monitor Reports – April to December 2014, Centennial Environmental Monitori – January to November 2015, LDP-006 Data Summary.XIs – 08/01/20 monitoring for LDP-006 appeared to be conducted in accordance with Plan. Data concerning monitoring of Neubecks Creek (upstream/downstrear NOW station), Cooks Dam, Retention Dam, Main Sediment Dam, Stor Dam, Washery Sediment Dam for November and December 2015 and December 2014 was available for review. Mitigation measures were not clearly defined in the management plant, note that "A review of existing and approved projects in the area that or generate a cumulative impact on surface waters has been undertaken surface water impacts assessment (RPS 2013b). The report summaris projects, their potential impact, mitigation measures and residual conse Water Management Plan TARP for WCS (RPS, 2013, pp.59-60) states an Amber condition will be an "Assessment of potential cause by Envil Community Coordinator and application of appropriate mitigation measures 'are provided in the plan. The pumping of water from Cooks Dam to the DML to manage inflow I during the site inspection. Other 'management' measures noted by the site inspection. Other imangement' measures noted by the sussess the inflows including; expansion of groundwater monitoring network; the installation of piezometers within the underground water level fluctuations within the mine void; hydrochemical and isotopic sampling and analysis; and Commissioning of an updated Lidar survey to better assess surface and drainage at the WCS site. It is noted a number of the above management measures were in the pimplemented at the time of the site inspection. Given that many were sand a large review of the WMP is underway, the exte				

Not Verified (Implementation)

nce with and

nitoring Monthly toring Monthly Reports /2015 to 03/12/2015) rith Water Management

eam/far downstream, tockpile Sediment and November and

an. RPS (2013, p.25) at could potentially een as part of the arises the significant onsequences". The ates that the response nvironment and easures". No

w levels was observed the auditors included:

Dam to better define

Management Plan) to

workings to monitor

nd rface water catchments

ne process of being re still to be completed ntation could not be

Developmer	t Consent SSD-5579							
Condition No.	Condition	Evidence Source	Comment / Find	ing				
3.24 cont'd	_	•	The site uses EP Reporting (2000) water quality trigg	L 3607 criteria and statistica ger levels.	a, Australian (I analysis of b	Guidelines for W baseline data wl	/ater Quality Moni	toring and onitoring
			The Electrical Co in Table 11.1 of t for the period 1 A exceedances of t µS/cm, while the 2016. However, suitable SSTVs f Creek Far Down same parameters Far Downstream under review by WCS site" (RPS, The following exc	nductivity (EC he Water Man wril 2014 throu he Water Mar median result the Plan also for a range or p stream. Corres to at LDP006 w to within the S the EPA and a 2014, p.57).) Site Specifi agement Pla ugh to 5 Febr lagement Pla was 3,565 µ notes that "G parameters to sponding disc rith a view to SSTVs. At the pre noted agai	c Trigger Value n is 3,693 µS/cr uary 2016 ident n EC SSTV. T S/cm between 1 GHD (2014) hav be applied to t harge limits hav maintain the wa e time of writing roposed SSTVs	(SSTV) for LDP-0 m. Monthly EC da iffied that there 8 r he average result April 2014 and 1 e undertaken a st he water quality of ve also been prop ther quality at Wan to the SSTV asses s are not currently fater Managemen	006 as stated ta reviewed nonthly EC was 3,332 February udy to derive f Wangcol osed for the gcol Creek sment was in use at the
			and discharge lin November and D	nits (RPS, 201 ecember 2015	4, Table 11.1 and Novem	, p.58 ^{Note} ') from per and Decem	n the data reviewe ber 2014.	ed dated
			Location	Date	EC Result (µS/cm)	WMP EC SSTV (µS/cm) ^{Note 1}	Hardness Result (mg/l)	WMP Hd SSTV (mg/l) ^{Note 1}
			Neubecks Far D/S	05/11/2015	1,158	690	305	265
			Neubecks Far D/S	19/11/2015	899	690	302	
			Neubecks Far D/S	03/12/2015	2,840	690	779	
			Neubecks Far D/S	17/12/2015	3,080	690	1,050	
			Neubecks Far D/S	06//11/2014	-	-	702	
			Neubecks Far	20/11/2014	-	-	997	
			Neubecks Far D/S	04/12/2014	-	-	362	
			Neubecks Far	18/12/2014	-	-	798	
			LDP-006	03/12/2015	4,550	3,690	-	-
			LDP-006	18/11/2014	3,900	3,690	-	-
			is not always cor data sets plotted can be seen the upper EC range reference of over compliance asse The Water Mana mg/L), Manganes (2014, p.58) note surface water mo site surface water	sistent with th with rainfall an logger has pro (>2500 µS/cm all salinity trens ssment?. gement Plan a se (dissolved, d that "It is no ponitoring taking r storage facili	at measured at the degree oduced data ti), however, it ads, and the r also provides mg/L), Nickel t considered g place onsite ties and can	at the laborator of correlation k hat is above that is noted that th nonthly laborato SSTV's for Har (dissolved, mg beneficial to as as this water is be discharged v	y. Figure 16 show between the two d at measured by the e logger data is in bry analyses are to dness (mg/L), Iror /L) and Zinc (mg/L sign trigger values s being contained via LDP006".	at a sets. As lata sets. As lab for the tended a b be used for (dissolved, .). RPS to any other within the on-

As indicated above EC and Hardness exceedances of SSTVs occurred during the audit period at LDP-006 and the Neubecks Creek Far Downstream location.

Development Consent SSD-5579					
Condition No.	Condition	Evidence Source	Comment / Finding		
3.25	BIODIVERSITY Biodiversity Offset Strategy	RPS (2014), Regional Biodiversity Strategy Neubeck	WCS management reported the strategy was in the process of bein offset land would likely be on land in the vicinity of Centennial Airly		
	By the end of December 2016, the Applicant shall, to the satisfaction of the Director- General:	Extension Project and Angus Place Colliery Extension Project, 14 March 2014, Ref: PR121085; Final / March 2014.			
	 Provide an area that is suitable in its vegetation types and extent to satisfactorily offset the impacts of clearing 10.67 hectares of native vegetation (Coxs Permian Red Stringybark – Brittle Gum Woodland); and 				
	 Make suitable arrangements to manage, protect and provide long-term security for this area, consistent with the relevant NSW Offsets policy. 				



ng prepared and the Mine.

Compliance Status & Recommendation

Not Activated

Developme	evelopment Consent SSD-5579					
Condition No.	Condition	Evidence Source	Comment / Finding			
3.26	Additional Rehabilitation Initiatives	 RPS Australia (2015), Tree Clearance Supervision For Tailings Dam Expansion, Western Coal Services, 12 October 2015, Ref; 127341:DW:AB. NewEra (2015-A) Follow Up Report Coal Services Revegetation Works, 15 November 2015. NewEra (2015-B) Follow Up Report Coal Services Revegetation Works, 15 November 2015. Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. AECOM (2015), Springvale Coal Services Annual Rehabilitation Monitoring 2015, 4 November 2015, Ref: 60442266. AECOM (2014), Rehabilitation Monitoring - Selected Centennial Mine Sites, Lithgow, 2014, 11 June 2014, Ref: 60317682. AECOM (2012), Rehabilitation Monitoring using EFA – Centennial Mine Sites, Lithgow, 13 April 2012. AECOM (2011), Rehabilitation Monitoring, 2011, 11 May 2011, Ref: 60212715. AECOM (2010), Rehabilitation Monitoring, 2010, 25 June 2010, Ref: 60156261. 	 WCS management reported that the rehabilitation initiatives occurred to 21 September 2015. The 2015 / 2022 MOP (Centennial, 2015, p.17) notes that progressive undertaken during the MOP term in the following areas: "Domain 6 – 0 This area within the Western Coal Services Project Application Area w 'Additional Rehabilitation Initiatives Area' in the EIS. The Conservative value of the main Lamberts Gully drainage line and the area to Disposal REA and the Castlereagh Highway. This area has been part Details of rehabilitation in these areas are outlined in Section 7.3. The of Conservation Sites associated with Centennial Western Operations Regional Biodiversity Strategy (RPS 2014)". The following Additional Rehabilitation Initiatives were noted: Evidence of recently planted saplings was observed at the Rehab Area during the site inspection. Approximately 150 saplings had area. Casuarina saplings were observed to be self-established ir ecologist visited the site on the 1st - 2nd and 12th of June 2015 at August 2015 and inspected trees requiring removal and marked t attributes (e.g. hollows, nests etc.). An RPS ecologist was preserver serve ce clearance on the 9th-12th of June 2015. A total of 221 tree 159 medium and 28 large hollows) identified as potential habitat the felled trees only four were occupied by fauna (all individuals v possums Pseudocheirus peregrinus) and of these, two individuals v possums Pseudocheirus peregrinus) and of these. The other two self relive vegetation to the south. Felled trees were left overnight prior to st 2015, p.4). RPS (2015, p.4) reported that "At the end of felling oy were injured during the works and where individuals were detecter relocated to nearby vegetation. The wombat burrow present in the footprint was successfully excavated and the absence of the worm of the stres. Nevernifer and Elexibilitation section. A portion of these seeds are to be presection? A report by NewEra (2015-A) noted that "at the end of felling oy were injured			

rehabilitation will be Conservation Sites – was referred as the ation Sites at to 3H) consists of a between the Cotially rehabilitated. overall management are outlined in the

bilitation Initiative been planted in the these areas. the supervision of that "An RPS and the 12th - 13th those with habitat nt at the site to 9th and 26th of es (with 356 small, trees were felled. Of were common ringtail s were relocated ocated in nearby tockpiling" (RPS, perations no animals . ed, they were ne disturbance mbat was confirmed". ducted on 5 seeds were found on Eucalyptus NewEra to have some nannifera trees in the Era (2015-A, p.7) rcially obtained seeds propagated and any t in the rehabilitation

abilitated area (i.e. as conducted on 12 roughout the area, estock were

Compliance Status & Recommendation

Compliant

REC-2016-31 – Ensure that the recommendations provided in the 2012, 2013 and 2014 Rehabilitation Monitoring Report for Selected Centennial Mine Sites, Lithgow are implemented.

Developme	velopment Consent SSD-5579					
Condition No.	Condition	Evidence Source	Comment / Finding			
		•	Rehabilitation monitoring at Centennial sites including WCS com 2014 constituted the fifth year of data acquisition for some of the The methodology applied for the rehabilitation monitoring progra involved the implementation of a modified version of the CSIRO Function Analysis (EFA) tool, which includes the following comp Function Analysis (LFA), rill surveys, vegetation dynamics, habit disturbance assessment and photographic monitoring. No new t established as part of the 2014 program of works. WCS has five monitoring transects (CSV R1, CSV R2, CSV R3, CSV R4 and r resurveyed in 2014 (AECOM, 2014). AECOM (2014, p.9) note t describe the functionality of the landscape as a biophysical syst assessment of the landscape organisation (though the LOI and surface condition (through the SSCIs)".			
			The results of the 2014 monitoring program identified that "Reha at Coal Services differs between the sites, mostly reflecting the with older sites generally performing better. CSV R1 and CSV F rehabilitation performance rating with scores of 37 and 33, resp CSV R3 perform satisfactorily with scores of 54 and 41, respect is the best performing area with good score of 68" (AECOM, 20 monitoring program also noted for WCS that:			
			 "Sifton bush at Coal Services which in places occurs in patches preventing the establishment of desirable spectrum of the setablishment of desirable spectrum of the setablishment of the setablishment of desirable spectrum of desirable spectrum of the setablishment of desirable spectrum of desi			
			A number of recommendations generic to the sites were provided in program report (AECOM, 2014). These included, but were not limite			
			 "Selection of appropriate species in the revegetation mix, in strata including ground cover crops together with longer livil Use of fast growing and establishing sterile ground cover sp soil surface during the early phase of the rehabilitation prog As a general measure, the rehabilitated areas would greatly addition / spread of organic material on the ground to enhal organic matter. This can be in the form of brush material frow wood chips, compost, etc". (AECOM, 2014, p.76). 			
			It is also noted that mitigation measures specific to each site were pr (Section 7.4) and 2013 rehabilitation monitoring reports and that the considered relevant and should be applied to help improve the overa rehabilitated areas.			
			AECOM (2015, p.34) noted that "Services in comparison to the 2014 returned an overall site rating within the same band of values). With older rehabilitation areas (where CSV R4 is located), the key issues rehabilitation performance scores generally included:			
			 poor ground cover (including both grass cover and litter and inadequate vegetation community structure and compositio assemblages), low vegetation canopy cover, poor habitat complexity as available to native fauna, and weed incursion". 			
			The 2015 Annual Rehabilitation Monitoring Report (AECOM, 2015) precommendations to improve the performance of post mined rehability			

nmenced in 2010 and e monitoring sites. am (AECOM, 2014) developed Ecosystem onents: Landscape tat complexity, transects were e rehabilitation CSV R5) that were that "The LFA results tem by providing an PAI) and of the soil

abilitation performance age of rehabilitation, R5 still have a poor ectively. CSV R2 and tively. Finally, CSV R4 14, p.55). The

dense infestation cies"; and CSV R5 which , 2014, p.75).

the monitoring ed to:

ncluding species for all ing species; pecies to protect the gram; y benefit from the

nce ground cover and om local native plants,

rovided in the 2012 se measures are still all performance of

4 results (i.e. all sites the exception of the undermining overall

d debris), on (species

provided eight itated lands at WCS.

Developme	Development Consent SSD-5579					
Condition No.	Condition	Evid	lence Source	Comment / Finding	Compliance Status & Recommendation	
3.27	Wangcol and Lamberts Gully Creeks The Applicant shall improve the riparian habitat of Wangcol Creek for at least 100 metres downstream of the proposed Link haul road bridge crossing of the creek, to the satisfaction of the Director-General.	-		It was unclear to both WCS management and MCW Environmental if this condition applied whether the link haul road bridge was or was not constructed. The Link haul road bridge crossing of the creek had not been constructed at the time of the site inspection and WCS management was not clear if the haul road (and bridge) would be constructed. It was unclear if this condition applied whether the bridge is built or not.	Not Activated REC-2016-32 – Confirm with DP&E as to whether this condition applies if the link haul road bridge is not constructed.	
3.28	Habitat for Threatened Fauna Species	•	RPS (2014), Regional Biodiversity Strategy Neubeck Project, Springvale Mine Extension Project and Angus Place Colliery Extension	WCS management reported the Biodiversity Offset Strategy was in the process of being	Not Activated	
	The Applicant shall ensure that the Biodiversity Offset Strategy and Additional Rehabilitation Initiatives areas, in combination, provide suitable habitat for threatened fauna species recorded on the SCSS, namely the:			Project, Springvale Mine Extension Project and Angus Place Colliery Extension	Refer to Condition 26, Schedule 3.	
	 Brown Treecreeper; Gang-gang Cockatoo; Little Eagle; Scarlet Robin; Large-eared Pied Bat; Eastern Falsistrelle; Eastern Bent Wing Bat; and Yellow Bellied Sheathtail Bat. 	Project, 14 March 2014, Ref: PR121085; Final / March 2014.				

Developme	evelopment Consent SSD-5579							
Condition No.	Condition	Evidence Source	Comment / Finding					
3.29	 Biodiversity Management Plan The Applicant shall prepare and implement a Biodiversity Management Plan for the development to the satisfaction of the Director-General. This plan must: a) Be prepared in consultation with OEH and Forestry Corporation of NSW, and be submitted to the Director-General for approval by the end of December 2016; b) describe the short, medium, and long-term measures that would be implemented to: manage remnant vegetation and habitat on the site; and implement the Biodiversity Offset Strategy; c) Include detailed performance and completion criteria for evaluating the performance of the Biodiversity Offset Strategy, and triggering any necessary remedial action; d) Include a detailed description of the measures that would be implemented over the next 3 years (to be updated for each 3-year period following initial preparation of the plan) for: enhancing the quality of existing vegetation and fauna habitat; establishing native vegetation establishment and the introduction of natural regeneration, targeted vegetation establishment and the introduction of naturally scarce fauna habitat features (where necessary); protecting vegetation and soil outside the approved disturbance area; maximising the salvage of resources within the approved disturbance area; maximising the salvage of fest strategy; collecting and propagating seed; minimising the impacts to fauna on site, including undertaking preclearance surveys; managing any potential conflicts between the proposed restoration works in the Additional Rehabilitation Initiatives area and any Aboriginal heritage values (both cultural and archaeological); managing salinity; controlling access; and managing bushfire risk; (e) Include a program to monitor and report on the effectiveness of these measures, and progress against the detailed performance a	 RPS (2014), Regional Biodiversity Strategy Neubeck Project, Springvale Mine Extension Project and Angus Place Colliery Extension Project, 14 March 2014, Ref: PR121085; Final / March 2014. RPS Australia (2015), Tree Clearance Supervision For Tailings Dam Expansion, Western Coal Services, 12 October 2015, Ref; 127341:DW:AB. SLR (2014), Rehabilitation and Closure Plan, September 2014. NewEra (2015-A) Follow Up Report Coal Services Revegetation Works, 15 November 2015. NewEra (2015-B) Follow Up Report Coal Services Revegetation Works, 15 November 2015. Letter – DRE (2015), Approval of Mining Operations Plan – Western Coal Services, 23 December 2015. 	 Preparation: The Regional Biodiversity Strategy Neubeck Project, Springvale Mine Exteand Angus Place Colliery Extension Project (March, 2014) was developed requirements issued by the Director-General for the Angus Place and Spri on 6th November 2012 and the Neubeck Coal Project on 30 August 2013 "An offset strategy, which is clearly quantified, to ensure that the developm improves the terrestrial and aquatic biodiversity values of the region in the term". The document quantifies the direct and indirect impacts of the three Significant Developments (SSD), it provides details of how the direct and i impacts will be offset, what additional supplementary offsets that are proportion offsets will be secured and managed, and how the offset measures proport Centennial will satisfy both the state and federal offset principles. At the time of the site inspection there did not appear to be significant inter the Biodiversity Management Plan (Regional Biodiversity Strategy Neubeck Springvale Mine Extension Project and Angus Place Colliery Extension Pr Rehabilitation Management Plan (now the November 2015 to October 2022). The Rehabilitation and Closure Management Plan (SLR, 2014, p.19) state Biodiversity Management Plan will be integrated with this Rehabilitation and for Western Coal Services as per Schedule 3 Condition 45 and Schedule the Development Consent. The management plans. The Biodiversity Managen et al. The management plans. The Biodiversity Managen et al. Schedule 12 October 2015. Implementation Evidence of recently planted saplings was observed at the Rehabilitation of Casuarina saplings were observed to be established. A report from RPS dated 12 October 2015 was available detailing the supclearance for the tailings dam expansion. The report noted that "An RPS the site on the 1st - 2nd and 12th of June 2015 and the 12th - 13th Augus inspected trees requiring removal and marked those with habitat attributes nestes etc.). An					

- Strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
- include details of who would be responsible for monitoring, reviewing, and g) implementing the plan.

Note: The Biodiversity Management Plan and Rehabilitation Management Plan require substantial integration to achieve biodiversity objectives for the undisturbed and rehabilitated areas of the SCSS.

Older areas of rehabilitation, such as the Lamberts Gully rehabilitation offset area to the east of the new REA were observed to be established with limited weed infestation; however, ground cover was noted to be sparse with limited topsoil.

excavated and the absence of the wombat was confirmed".

Given Biodiversity Management Plan is not required to be submitted to DP&E for approval until the end of 2016, it was assessed that this condition is not yet activated. However, WCS needs to demonstrate that substantial integration to achieve biodiversity objectives for the undisturbed and rehabilitated areas has occurred between the Biodiversity Management Plan and Rehabilitation Management Plan.

DRE (DRE, 2015) requested that within 18 months (i.e. by June 2017) WCS prepare and submit a capping design for REA that will adequately address the risks associated with the construction, operation and closure of the emplacement area.

ension Project d to address the ingvale projects which included ment maintains or e medium to long e State indirect residual osed, how those sed by

gration between ck Project, roject) and 22 MÓP).

es that "The nd Closure Plan 3 Condition 29 of tion Initiatives' gement Plan is

Initiative Area in the area.

ervision of tree ecologist visited at 2015 and s (e.g. hollows, rance on the 9thof September

ws) identified as ed trees were he new REA.

RPS (2015, p.4) reported that "At the end of felling operations no animals were injured during the works and where individuals were detected, they were relocated to nearby vegetation. The wombat burrow present in the disturbance footprint was successfully

Compliance Status & Recommendation

Not Activated

REC-2016-33 - Ensure the Biodiversity Management Plan is sufficient to achieve biodiversity objectives for the undisturbed and rehabilitated areas given the Rehabilitation and Closure Management has been superceded by the 2015 / 2022 MOP.

Developme	Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding		
3.30	 Conservation Bond Within 6 months of the approval of the Biodiversity Management Plan, unless the Director-General agrees otherwise, the Applicant shall lodge a Conservation Bond with P&I to ensure that the Biodiversity Offset Strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan. The sum of the bond shall be determined by: a) Calculating the full cost of implementing the Biodiversity Offset Strategy (other than land acquisition costs); and b) Employing a suitably qualified quantity surveyor to verify the calculated costs. If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Director-General, the Director-General will release the bond. If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Director-General will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works. Notes: Alternative funding arrangements for long-term management of the Biodiversity Offset Strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to the conservation reserve estate can be used to reduce the liability of the conservation bond. The sum of the bond may be reviewed in conjunction with any revision to the Biodiversity 	-	Not Activated		
3.31	HERITAGE Protection of Aboriginal Sites The Applicant shall ensure that the development does not cause any direct or indirect impact on identified Aboriginal sites located outside the approved disturbance area of the development on the site.	 RPS (2014), Centennial's Western Holdings Aboriginal Cultural heritage Management Plan, 2014, Ref: PR121000; Final September 2014. Letter – DP&E (2014), Western Region Aboriginal Cultural Heritage Management Plan, 23 October 2014. 	The Centennial Aboriginal Cultural Heritage Management Plan (Ad prepared to provide Centennial with a consistent approach to cons Aboriginal communities about Aboriginal cultural heritage identificat identify consistent minimum standards and processes for Aboriginal identification, monitoring and management across Centennial's we ACHMP includes the following regional Centennial sites: Airly Mind Clarence Colliery; Lidsdale Siding; Springvale Mine and WCS. Th protocols for Aboriginal consultation, handling sensitive cultural inf responsibilities, document control and dispute resolution. The ACHMP was approved by the Director-General on 23 October WCS management reported that no Aboriginal sites were impacted One Aboriginal site located behind 'A' Pit was observed to be fenc inspection.		



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Compliance Status & Recommendation

Not Activated

ACHMP) (RPS, 2014) was Compliant nsultation with the local ication as well as to inal cultural heritage western operations. The ine; Angus Place Colliery; The ACHMP outlines formation, roles and

r 2014.

ed during the audit period. ced during the site

Developme	nt Consent SSD-5579		
Condition No.	Condition	Evidence Source	Comment / Finding
3.32	 Heritage Management Plan The Applicant shall prepare and implement a Heritage Management Plan for the development to the satisfaction of the Director-General. This Plan must: a) Be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Director-General; b) Be prepared in consultation with OEH and local Aboriginal stakeholders (in relation to the management of Aboriginal heritage values); c) Be submitted to the Director-General for approval within 6 months of the date of this consent, unless the Director-General agrees otherwise; d) Include a description of the measures that would be implemented for: addressing relevant statutory requirements under the National Parks and Wildlife Act 1974; protecting, monitoring and managing Aboriginal sites outside the approved disturbance area (including sites shown on the figure in Appendix 6, with particular attention to site 45-1-0218); maintaining and managing reasonable access for Aboriginal stakeholders to cultural heritage items on site; managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols; ongoing consultation with local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on-site and in the Biodiversity Offset Strategy area; and ensuring any workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions. 	 RPS (2014), Centennial's Western Holdings Aboriginal Cultural heritage Management Plan, 2014, Ref: PR121000; Final September 2014. Letter – DP&E (2014), Western Region Aboriginal Cultural Heritage Management Plan, 23 October 2014. 	The Centennial Aboriginal Cultural Heritage Management Plan (ACHM prepared to provide Centennial with a consistent approach concerning the local Aboriginal communities about Aboriginal cultural heritage ide to identify consistent minimum standards and processes for Aboriginal identification, monitoring and management across Centennial's weste ACHMP includes the following regional Centennial sites: Airly Mine; A Clarence Colliery; Lidsdale Siding; Springvale Mine and WCS. The A protocols for Aboriginal consultation, handling sensitive cultural inform responsibilities, document control and dispute resolution. The ACHMP was approved by the Director-General on 23 October 20 WCS management reported that no Aboriginal cultural sites were imp audit period. One Aboriginal site located behind 'A' Pit was observed the site inspection.
3.33	TRANSPORT Intersection Upgrade Within 6 months of the date of this consent, unless the Director-General agrees otherwise, the Applicant shall re-paint line markings at the intersection of the Castlereagh Highway and the SCSS Access Road to the satisfaction of RMS.	 Site observations Central West Line Marking Quotation, 7 August 2014. Barnson Pty Ltd Invoice, 30 November 2014. 	Line markings were observed at the intersection of the Castlereagh H Access Road during the site inspection. Evidence this was completed the RMS was not available for review; however, this condition is consi given the requirement was achieved within six months of approval.
3.34	Castlereagh Highway Overbridge The Applicant shall design, construct and operate the Link Haul Road overbridge of the Castlereagh Highway at no cost to, and to the satisfaction of, RMS.	Site observations	The Link Haul Road overbridge had not been constructed at the time

HMP) (RPS, 2014) was Compliant ng consultation with Ing consultation with dentification as well as nal cultural heritage stern operations. The Angus Place Colliery; ACHMP outlines rmation, roles and

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pacted during the during the during

Highway and the WCS Compliant red to the satisfaction of nsidered compliant

e of the site inspection. Not Activated

Developme	Development Consent SSD-5579					
Condition No.	Condition	Evidence Source	Comment / Finding			
3.35	 Construction Traffic Management Plan The Applicant shall prepare and implement a Construction Traffic Management Plan for the development, to the satisfaction of the Director-General. This plan shall be prepared in consultation with LCC and RMS, and must be submitted to the Director-General for approval prior to the commencement of construction activities on the site. This plan must address: a) Management of wide loads; b) Minimising inconvenience to the public, particularly during the construction of the Link Haul Road overbridge of the Castlereagh Highway; and c) Maintaining public safety. 	 SLR (2015) Western Coal Services Construction Traffic Management Plan Associated with the Upgrade of the Coal Reject Emplacement Area, August 2015, Ref: 630.11117- 2. Letter – RMS (2015), SSD- 5579: WCS Construction Traffic Management Plan, 13 August 2015. Letter – LCC (2015), WCS Construction Traffic Management Plan, 13 August 2015. Letter – DP&E (2015), WCS (SSD-5579) Construction Management Plans, 17 August 2015. Site observations. 	 A Construction Traffic Management Plan was prepared by SLR in A was prepared in consultation with LCC (LCC, 2015) and the RMS (F was approved by the Director-General on 17 August 2015. It is note the washery and link haul roads had not been completed at the time Construction traffic associated with the Stage 1 REA generally constbulldozers, that stayed on-site for the duration of the Stage 1 works. a) Section 6 of the Construction Traffic Management Plan (p.7) at management of wide loads. b) The Construction Traffic Management Plan (SLR, 2015) stated <i>upgrades will not be completed at this stage</i>". No Link Haul Ro observed during the site inspection. c) Sections 5 to 7 of the Construction Traffic Management Plan (p mitigation measures including public safety. 			
3.36	Road Maintenance – Private Haul Roads Within 3 months of the date of consent, until coal transportation ceases on each respective haul road, unless otherwise agreed by the Director-General, the Applicant shall 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 Director-General.	 Site observations Branson Pty Ltd (2014), Road Dilapidation Report - Western Coal Services, - Private Haul Roads, Blackmans Flat, Ref: 21518-T01_B, July 2014. 	 A Road Dilapidation Report - Western Coal Services, - Private Haul 2014) was prepared within three months of the date of consent. The initial inspection of haul roads: Haul Road #1 – Angus Place Colliery to Mt Piper Power Station Haul Road #2 –Wallerawang Power Station to Angus Place Co Section 6 of the report (Branson, 2014 pp.36-39) provided reco various distances (chainage) of the haul roads. Branson's (201- "The recommendations made in section 6.0 of this report should six (6) months of this report being issued". 			
3.37	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 Director-General, the Applicant shall 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 Director-General. Copies of the inspection and condition reports must be forwarded to the Director-General at the same time as they are provided to the Applicant.	 Branson Pty Ltd (2014), Road Dilapidation Report - Western Coal Services, - Private Haul Roads, Blackmans Flat, Ref: 21518-T01_B, July 2014. Centennial (2015), WCS – Annual Review 2014, 23 April 2015. 	 A letter from WCS to DP&E dated 23 April 2015 noted that due to A being placed in care and maintenance the last coal truck to use the Piper haul roads was on 6 March 2015. A Road Dilapidation Report - Western Coal Services, - Private Haul 2014) was prepared within three months of the date of consent. The initial inspection of haul roads: Haul Road #1 – Angus Place Colliery to Mt Piper Power Station Haul Road #2 –Wallerawang Power Station to Angus Place Col Section 6 of the report (Branson, 2014 pp.36-39) provided recommendations made in section 6.0 of this report should be compensations for the section 6 of the report being issued'. WCS management reported the be repaired once operations commence on the roads. 			
3.38	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.	Site observations	WCS management reported that repairs to the haul roads will be co roads become operational again. Given the haul roads were not be the site inspection this condition was considered not activated.			

Compliant

August 2015. The Plan RMS, 2015). The Plan ed that construction of e of the site inspection. sisted of excavators and

ddresses the

that "*Link road* bad overbridge was

op.6-8) address traffic

I Roads (Branson, Compliant ne report represents the n (6.90km); and olliery (5.40km). ommendations at 14, p.40) stated that ld be completed within Angus Place Colliery Compliant Wallerawang and Mt I Roads (Branson, ne report represents the n (6.90km); and olliery (5.40km). endations at various ed that "The pleted within six (6) hat the haul roads would ompleted once the Not Activated eing used at the time of

Developme	evelopment Consent SSD-5579						
Condition No.	Condition	Evidence Source	Comment / Finding				
3.39	 3.39 Transport Monitoring • The Applicant shall monitor and report on: a) The amount of coal transported to and from the site; and b) The date and time of each truck movement of coal or coal rejects to and from the site; to the satisfaction of the Director-General. • 	 Register of Reject Coal Transported To The Co Disposal Pit – 04/11/2014 to 24/08/2015.xls. Collins Transport (2015), Transport of Rubbish, 26 November 2015. Angus Place Deliveries Spread 	A spot check of Angus Place coal deliveries to Mount Piper Power Station between 16April 2014 and 18 November 2014 identified that incoming and outgoing tonnages we recorded as well as the date and time, truck registration and ID and origin of the load.The following records of loads of reject coal transportation to the co-disposal pit were available:DateNo. of LoadsWeight				
		Sheets (XIs) – 16 April 2014 to	4/11/2014	18 Loads	225 tonne		
		To November 2014.	5/11/2014	18 Loads	225 tonne		
			10/11/2014	18 Loads	225 tonne		
			11/11/2014	18 Loads	225 tonne		
			12/11/2014	18 Loads	225 tonne		
		13/11/2014	18 Loads	225 tonne			
			17/11/2014	18 Loads	225 tonne		
			18/11/2014	18 Loads	225 tonne		
			19/11/2014	20 Loads	250 tonne		
			20/11/2014	16 Loads	200 tonne		
			17/12/2014	20 Loads	250 tonne		
			19/12/2014	22 Loads	275 tonne		
			19/01/2015	17 Loads	212.5 tonne		
			20/01/2015	17 Loads	212.5 tonne		
			8/04/2015	20 Loads	250 tonne		
			9/04/2015	24 Loads	300 tonne		
			16/05/2015	24 Loads	300 tonne		
			15/05/2015	36 Loads	450 tonne		
			16/05/2015	28 Loads	350 tonne		
			24/08/2015	28 Loads	350 tonne		
			The times of loads trar Transport, 2015). Loa November 2015. The management reported transport monitoring de	nsported on 26 November 2015 ads were transported between 0 weight and truck registration nur that the Director-General did no uring the audit period.	were available for review (Collins 7:05am and 2:35pm on the 26 nber were also included. WCS t provided comment concerning		

Compliance Status & Recommendation Compliant

MCW Environmental.

Developme	nt Consent SSD-5579			
Condition No.	Condition	Ev	idence Source	Comment / Finding
3.40	 VISUAL Operating Conditions The Applicant shall: a) Implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development; b) ensure no fixed outdoor lights or mobile lighting rigs shine above the horizontal; c) Ensure that all external lighting associated with the development complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting or its latest version; d) Ensure revegetation works associated with the batters of the Link Haul Road overbridge of the Castlereagh Highway are undertaken as soon as practicable and maintained to reduce visual impacts; e) Employ reasonable and feasible landscaping measures to minimise visual impacts of all private haul roads forming part of the development; and f) Ensure that the visual appearance of all buildings, structures, facilities or works (including paint colours and specifications) is aimed at blending as far as possible with the surrounding landscape, to the satisfaction of the Director-General. 	•	Motherwell Hire Pty Ltd (2016), Compliance Lighting Audit, 4 January 2016.	It is noted that main infrastructure such as the CHPP, office, conveyed located approximately 800 m from Castlereagh Highway behind land rehabilitated areas. Lighting A Compliance Lighting Audit (Motherwell, 2016) was conducted that field measurements and assessment undertaken found that illuminar were well within the allowable criteria The qualitative assessment unexternal viewpoint supported the field measurements with little direct the nature of the terrain and only unobtrusive sky glow from the CHP that operations at the mine are meeting the requirements of the AS.4 complying with relevant criteria and there have been no recorded coulighting, no recommendations are currently proposed for the Operation p.13). Three lighting types are installed at the Site: Metal Halide, High Press and LED. Lights were observed to be pointing in a downward directed. The following lighting structures were observed on-site: fixed, tempor machinery (i.e. incorporated). Revegetation The link haul road bridge had not been constructed; however, vegetar observed around the Retention Pond, Cooks Dam and the DML front Highway. Unsealed areas of land were located away from the highway readily visible. Visual The CHPP and main conveyor are built in neutral colours, to help nullighting and blend with the surrounding landscape.
3.41	 BUSHFIRE MANAGEMENT The Applicant shall: a) Ensure that the development is suitably equipped to respond to any fires on site; and b) Assist the Rural Fire Service and emergency services as much as possible if there is a fire in the surrounding area. 	•	Centennial Coal Bushfire Management System, Ref: SCSO-MS-009, May 2013. NewEra (2016), Quality Assurance Report Bushland Surrounding Ponds, Office Areas & Access Roads & Conveyor Belt Spraying to comply with Fire Safety Requirements, 15 January 2016.	Fire hydrants were observed to be located at strategic points around conveyor transition points (e.g. OL-3 / OL-4). Pressurised water is an The Washery Service Water Tank is filled with water from Cooks Dar a firefighting source if required. Fire trained personnel are employed reported to be instructed to assist Rural Fire Services and emergency possible if there is a fire on-site. No training records were viewed or management reported that conveyor lines get weed sprayed mainly f reduction (NewEra, 2016). WCS reported that Centennial personnel assisted RFS during the bu in the area in October 2013. Fire protection and emergency response specialists were not include team and an assessment of the adequacy of these elements has not

Compliance Status & Recommendation

ors and stockpiles are forms and

Compliant

identified that "The nce at all viewpoints ndertaken from each ct lighting visible due to PP. The CLA found 4282. SCSO is omplaints regarding ion" (Motherwell, 2016,

ssure Sodium (HPS) ion.

orary mobile and

ated areas were ting the Castlereagh way and were not

Illify any glare from

I the WCS, including Compliant vailable at the site. m and can be used as d by WCS and were y services as much as requested. WCS for fire hazard

ushfires that occurred

ed within the audit t been performed by

Developme	evelopment Consent SSD-5579							
Condition No.	Condition	Evidence Source	Comment / Finding					
3.42	Waste The Applicant shall: a) coal reject) generated by the development: b) Ensure that the waste generated by the development is appropriately stored, included and disposed of; and c) Monto and report on the effectiveness of waste minimisation and management measures in the Annual Review.	 Site Observations. Centennial (2015), WCS – Annual Review 2014, 23 April 2015. JR Richards & Sons Pty Ltd Total Waste Management Report – December 2015. 	 a) Coal reject is stored on-site and was used in the construction of REA. WCS management reported that more coal reject would b stages of the REA. b) Lidsdale uses JR Richards & Sons Pty Ltd as its waste contracto waste services. The December 2015 Waste Streams Monthly S showed that waste from the Site was disposed at the following L 20L and 205L Drums - Renewable Oil Services - Transport Facility License: 13092. Hydroaltic Hoses - Renewable Oil Services - Transport License: 13092 Hydroarbons (Oil / Grease) - Renewable Oil Services - Transport License: 13092. Hydroarbons (Oil / Grease) - Renewable Oil Services - Transport License: 13092. Batteries - Renewable Oil Services will transport to SIM's M Transport License: 12991 - Facility License: 13092. Batteries - Renewable Oil Services will transport to SIM's M Transport License: 12991 - SIMS Metal Recyclers Facility License: 5956 Paper - Ophir Road Resource Recovery Centre - Facility License: 5956 Paper - Ophir Road Resource Recovery Centre 5956 Chemicals - Renewable Oil Services will transport to a licer disposal - Transport License 12991 - Hazmat Services Facility License: 4602 Wash Bay Sludge - Worth Recycling - Facility License: 4602 Wash Bay Sludge - Worth Recycling - Facility License: 4602 Green Waste Lithgow City Council Landfill Facility - Fac Medical/ Sanitary - ISS Washroom Facilities - Oil Filters - Renewable Oil Services - Transport License: 1' License: 11658 Printer Toner Cartridges - Planet Ark Putrescible Waste - Lithgow City Council Landfill Facility - Fac Putrescible Waste - Lithgow City Council Landfill Facility - Fac Putrescible Waste - Lithgow City Council Landfill Facility - Fac Putrescible Waste - Bathurst City Council Landfill Facility - Wooden Pallets - Lithgow City Council Landfill Facility - Wooden Pallets - Lithgow City Council Landfill Facility - Scrap Metal - Sims Metal - Facility					

Stage 1 of the new be used for future

or who manages Summary Report ocations: t License: 12991 -

ense: 12991 - Facility

Transport License:

Metal for Recycling -_icense: 11264 ility License: 5956 y Centre - Facility

icense: 5956 re - Facility License:

ensed facility for ility License: 13255

02

cility License: 6004

1399 - Facility

Facility License: 6004 acility License: 6004 Facility License:

ense No: 12628

nent (Section 2.7). s 2012 and 2013 and al Review only and total waste oint B. The Annual vaste minimisation and

Compliance Status & Recommendation

Compliant

REC-2016-34 – Ensure the Annual Review reports on the on the effectiveness of waste minimisation and management measures in the Annual Review including a detailed breakdown of waste disposal.

Developme	nt Consent SSD-5579				
Condition No.	Condition		Evi	idence Source	Comment / Finding
3.43	REHABILITATION Rehabilitation Objectives The Applicant shall rehabilitat Sustainability. This rehabilitat Rehabilitation Strategy description comply with the objectives in Table 11: Rehabilitation Object Feature Site (as a whole) Safe, stable and non-polluting Lands on which other approved developments exist or are proposed, such as Energy Australia's ash emplacement or LCC's waste management facility Surface infrastructure Castlereagh Highway overbridge Portion of Ben Bullen State Forest within the SCSS Remainder of the SCSS Community	te the site to the satisfaction of the Director Environmental ion must be generally consistent with the proposed ibed in the EIS (and shown conceptually in Appendix 7) and Table 11. ives Objective Site (as a whole) Safe, stable and non-polluting Constructed landforms drain to the natural environment Minimise visual impact of final landforms as far as is reasonable and feasible Final land use to be determined in consultation with, and the agreement of the landowner The default objective for all land where a final land use is not otherwise agreed is to rehabilitate to the standards required for "Remainder of the SCSS" in this table To be decommissioned and removed, unless the Director Environmental Sustainability agrees otherwise To be decommissioned and removed, unless the Director Environmental Sustainability and RMS agrees otherwise To be managed to the satisfaction of the Forestry Corporation of NSW with the implementation of biodiversity enhancement measures, including weed and feral animal control Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprising: a wildlife corridor (shown as Additional Rehabilitation Initiatives in the figure in Appendix 7); Iocal native plant species; and a landform consistent with the surrounding environment Ensure public safety Minimise the adverse socio-economic effects associated with closure of the development	•	RPS (2013), Environmental Impact Statement Western Coal Services Project, July 2103, Ref: PR110910; Final / July 2013. NewEra (2016), Quality Assurance Report Bushland Surrounding Ponds, Office Areas & Access Roads & Conveyor Belt Spraying to comply with Fire Safety Requirements, 15 January 2016. SLR (2014), Rehabilitation Closure Plan, September 2014. Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. Letter - Centennial (2014), WCS Rehabilitation Management Plan (WCS DA SSD-5579)	 For the purposes of managing rehabilitation, and closure requiremendivided into 'Domains'. Primary domains at WCS are land managements with unique operational and functional purpose and similar geoperational and functional purpose and similar geoperational of durational purpose and similar geoperational of units characterised by a similar post mining land use of use). The MOP (Centennial, 2015) identifies the following Primary Domain - Domain 1 – Washery and Coal Handling: this area includes the coal processing area, coal stockpiles, associated conveyors, activate dams. Domain 2 – REA: this area incorporates both the existing approprioposed expanded REA. Domain 3 – Co-Disposal REA: this incorporates the old tailings dam. Domain 4 – Cooks and DML dams and other water management of the existing appropriate and the existing appropriate and the exist of the existing appropriate and the exist of the exist and the exist of the

Compliant

ents WCS has been ment units within the physical characteristics. domains are land objective (final land

ns:

existing and proposed ccess roads and storm

oved REA and the

dams and retention

ent structures; with the Lamberts

ation area, water und entries).

ement of this area is the

ement of this area is

mains:

ncluding the REA, Cone Vale. ing haul road batters

as of the site owned by t. These areas are sponsibility of Energy

ng private haul roads for

will remain at closure. sh Emplacement Area. lia. cil Waste

f Lithgow City Council.

Developme	nt Consent SSD-5579					
Condition No.	Condition		Evidence Source	Comment / Finding		
3.43	Continued: Table 11: Rehabilitation Objectives		Continued:	<i>Continued:</i> The status of objectives at th	Continued: The status of objectives at the time of the site inspection is provided	
	Feature	Objective		Feature	Performance against Objective	
	Site (as a whole) Safe, stable and non-polluting	Site (as a whole) Safe, stable and non-polluting Constructed landforms drain to the natural environment Minimise visual impact of final landforms as far as is reasonable and feasible		Site (as a whole) Safe, stable and non-polluting	Progressive rehabilitation was observed at around the site associated with 'A' Pit and t The Co-Disposal Reject Emplacement Area to stop receiving tailings within a few weeks	
	Lands on which other approved developments exist or are proposed, such as Energy Australia's ash emplacement or LCC's waste management facility	Final land use to be determined in consultation with, and the agreement of the landowner The default objective for all land where a final land use is not otherwise agreed is to rehabilitate to the standards required for "Remainder of the SCSS" in this table			Weed spraying is conducted beneath the c weed growth and aid bushfire management Final landforms had not been established for site at the time of the site inspection with th areas of medium growth development to th	
	Surface infrastructure	To be decommissioned and removed, unless the Director Environmental Sustainability agrees otherwise			site. These landforms were reported by We drain to the Lamberts Gully catchment.	
	Castlereagh Highway overbridge	To be decommissioned and removed, unless the Director Environmental Sustainability and RMS agrees otherwise		Lands on which other approved developments exist or are proposed, such as Energy Australia's ash	Land owned by Delta Electricity (Mount Pip leased by WCS (referred by WCS manager to be returned to Delta and used for ash en audit period.	
	Portion of Ben Bullen State Forest within the SCSS	To be managed to the satisfaction of the Forestry Corporation of NSW with the implementation of biodiversity enhancement measures, including weed and feral animal control		emplacement or LCC's waste management facility Surface infrastructure	WCS management were unclear concernin proposed LCC waste management facility. observed to be vegetated; however, it was medium and long-term rehabilitation management	
	Remainder of the SCSS	 Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprising: a wildlife corridor (shown as Additional Rehabilitation Initiatives in the figure in Appendix 7); local native plant species: and 	Surface Castlere overbrid		A letter from Centennial (Centennial, 2014) Forests NSW was observed requesting any concerning the Rehabilitation Management from NSW Forests concerning rehabilitation observed.	
		a landform consistent with the surrounding environment			Surface infrastructure remained on-site and closure. This requirement has not been trig	
	Community	Ensure public safety Minimise the adverse socio-economic effects associated with closure of the development		Castlereagh Highway overbridge	The overbridge had not been constructed a inspection WCS management reported that would be built in the future.	
				Portion of Ben Bullen State Forest within the WCS	WCS management reported that weed con portion of the Ben Bullen State Forest. The Forest was not inspected during the site vis	
					A letter from Centennial (Centennial, 2014) Forests NSW was observed requesting any concerning the Rehabilitation Management from NSW Forests concerning rehabilitation	

ed below:

Progressive rehabilitation was observed at a number of locations around the site associated with 'A' Pit and the new REA.
The Co-Disposal Reject Emplacement Area (Domain 3) was due to stop receiving tailings within a few weeks of the site inspection after which time WCS management reported that rehabilitation works to cap and contour part of the area would commence.
Weed spraying is conducted beneath the conveyors to prevent weed growth and aid bushfire management.
Final landforms had not been established for the majority of the site at the time of the site inspection with the exception of some areas of medium growth development to the south-east of the site. These landforms were reported by WCS management to drain to the Lamberts Gully catchment.
Land owned by Delta Electricity (Mount Piper Power Station) and leased by WCS (referred by WCS management as Area 4) is due to be returned to Delta and used for ash emplacement in the next audit period.
WCS management were unclear concerning the future of the proposed LCC waste management facility. The land was observed to be vegetated; however, it was unclear as to the medium and long-term rehabilitation management of this area.
A letter from Centennial (Centennial, 2014) dated 28 July 2014 to Forests NSW was observed requesting any comments concerning the Rehabilitation Management Plan. No feedback from NSW Forests concerning rehabilitation at the site was observed.
Surface infrastructure remained on-site and is likely to do so until closure. This requirement has not been triggered.
The overbridge had not been constructed at the time of the site inspection WCS management reported that it was unlikely it would be built in the future.
WCS management reported that weed control is conducted in a portion of the Ben Bullen State Forest. The Ben Bullen State Forest was not inspected during the site visit.
A letter from Centennial (Centennial, 2014) dated 28 July 2014 to Forests NSW was observed requesting any comments concerning the Rehabilitation Management Plan, No feedback from NSW Forests concerning rehabilitation at the site was observed.
Planting was observed in the Rehabilitation Initiative Area using local native plant species. Final landforms for the majority of the site had still to be completed at the time of the site inspection.

Remainder of the WCS

Developme	ent Consent SSD-5579				
Condition No.	Condition	Evidence Source	Commen	t / Finding	
3.43	Continued:	Continued:	Continue	d:	
			Feature		Performance against Objective
			Commun	ity	New gates were observed at the access p No open shafts or excavations observed; one of the derelict buildings on the site wa Elements relating to socio economic effect been triggered at the time of the audit.
			The MOP undertake site for se rehabilitat term, how monitoring sites. Foll the subse rehabilitat	(Centennial, 2015, en at Western Coal everal years, due to tion trials or researd vever Western Coal g for areas of curre dowing the continue equent data, Wester tion at the site, inclu- ubilitation Closure P	p.84) states that "There have been no Services. No final rehabilitation has bee areas being required for continued ope ch are planned at Western Coal Service Services plan to continue undertaking In rehabilitation, areas of future rehabilit d implementation of the rehabilitation m rn Coal Services will review opportunitie uding potential future trials".
			Year	Proposed Rehabilita	ation and Closure Activities
			5	 Continued em The northern Continuation Rehabilitation 	placement in REA; cells of the Co-Disposal area have been fille of rehabilitation in 'Additional Rehabilitation A Maintenance.
			10	 Continued em The northern Rehabilitation 	nplacement in REA – moving east; cells of the Co-Disposal area have been reha Maintenance.
			15	 Continued em Commencing The northern Rehabilitation 	pplacement in REA – moving east; the rehabilitation of the REA; cells of the Co-Disposal area have been reha Maintenance.
			20	 Continued em Continuing the The northern Rehabilitation 	nplacement in REA; e rehabilitation of REA benches; cells of the Co-Disposal area have been reha Maintenance.
			25	 Continued err Continuing the The northern Rehabilitation 	nplacement in REA; e rehabilitation of REA benches; cells of the Co-Disposal area have been reha Maintenance.
			Final Closure	 No emplacem REA has been The Co-Dispon Rehabilitation Water manag 	nent in the REA; n filled, shaped and rehabilitated; asal area has been fully rehabilitated; of the Washery and Coal Handling; and ement structures to remain at closure.
			WCS mar period. D continued Closure/N	hagement reported evelopment Conse and progressive re MOP are considered	that no final rehabilitation was undertak nt SSD-5579 allows use of the site until ahabilitation of the Domains listed in the achievable before this date.

MCW Environmental

Compliance Status & Recommendation

points to Kerosene Vale. however, access to the as possible.

cts of Closure have not

rehabilitation trials een undertaken at the erations. No is a function of the MOP of rehabilitation litation and analogue monitoring program and ies to improve

rehabilitation at WCS:

ed and capped; Activities'; and
nabilitated; and
nabilitated; and
nabilitated; and
nabilitated; and

ken during the audit 2039; however, Rehabilitation and

Condition No. Condition Evidence Source Comment / Finding 3.44 Progressive Rehabilitation The Applicant shall progressively rehabilitate the site, including the Kerosene Vale Stockpile Area, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies must be employed where areas prone to dust generation are not subject to active operations but cannot yet be permanently rehabilitated. • Site observations. • Photographic evidence of provide the site that are progressively rehabilitated may be subject to further disturbance in future. • Or the site that are progressively rehabilitated may be subject to further • Site observations. • Comment / Finding Contour Ba • Or the site that are progressively rehabilitated may be subject to further • Site observations. • Contour Ba	progressive rehabilitation is shown belo	
 3.44 Progressive Rehabilitation The Applicant shall progressively rehabilitate the site, including the Kerosene Vale Stockpile Area, as soon as reasonably practicable following disturbance. All reasonable and feasible measures must be taken to minimise the total area exposed for dust generation at any time. Interim rehabilitation strategies must be employed where areas prone to dust generation are not subject to active operations but cannot yet be permanently rehabilitated. Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to further disturbance in future. Site observations. S	progressive rehabilitation is shown belo	
'A' Pit pump pit ref Evidence of temporary gras and for soil stabilisation we formerly completed (i.e. fin estimated to be in approxin the REA was still under con the REA was still under con construction is ongoing ref The management acknowledge (observed by the auditors) ROM stockpile pad had no in 2014 at Kerosene Vale t step rogressive rehabilitati non-compliant given progr	ankContour Bank arImage: Contour Bank ar <th>litation is shown below: Itation is shown below: Contour Bank and Contour Bank and Contour Bank and Rehabilitation of the around se the total area expose the site inspection. The three Stages have ber years time. It is noted to be the site inspection. The three Stages have ber years time. It is noted to be years time. It is noted to choose the total area expose the site inspection. The three Stages have ber years time. It is noted to be years time. It is noted to choose the total area expose the site inspection. The the site inspection is noted above). The areas should be con- nerly the responsibility of this is now the response updating sediment and 'ale site, rehabilitation of a noted that Angus Pla atterial stockpiles and the spection. Acknowledgility of the areas not commenced ".</th>	litation is shown below: Itation is shown below: Contour Bank and Contour Bank and Contour Bank and Rehabilitation of the around se the total area expose the site inspection. The three Stages have ber years time. It is noted to be the site inspection. The three Stages have ber years time. It is noted to be years time. It is noted to choose the total area expose the site inspection. The three Stages have ber years time. It is noted to be years time. It is noted to choose the total area expose the site inspection. The the site inspection is noted above). The areas should be con- nerly the responsibility of this is now the response updating sediment and 'ale site, rehabilitation of a noted that Angus Pla atterial stockpiles and the spection. Acknowledgility of the areas not commenced ".



Sediment Dam Wall



clean water diversion new REA

ed for dust generation he new REA cannot be en completed, hat Area A including inspection and However whilst onsidered.

of Angus Place sibility of WCS. WCS erosion controls f areas other than the ce commenced works nat this process was ng that DRE is keen on has found to be 'as soon as

Compliance Status & Recommendation

Non-compliant (for Kerosene Vale)

Compliant (for Western Coal Services)

REC-2016-35 - Continue progressive rehabilitation of disturbed areas to minimise the total area exposed for dust.

REC-2016-36 - Commence progressive rehabilitation at Kerosene Vale (Domain 6) in accordance with Section 9.6 of the Rehabilitation and Closure Management Plan.

Developme	nt Consent SSD-5579		
Condition No.	Condition	Evidence Source	Comment / Finding
3.45	 Rehabilitation Management Plan The Applicant shall prepare and implement a Rehabilitation Management Plan to the satisfaction of the Director Environmental Sustainability. This plan must: Be prepared in consultation with P&I, EPA, NOW, OEH, SCA, Forestry Corporation of NSW, CCC and LCC; Be submitted to the Director Environmental Sustainability for approval within 4 months of the date of this consent; unless the Director Environmental Sustainability agrees otherwise; Be prepared in accordance with any relevant DRE guideline; Describe how the rehabilitation of the site would be integrated with the implementation of the Biodiversity Management Plan; Include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, and triggering remedial action (if necessary); Describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent, and address all aspects of rehabilitation including facility closure, final landform and final land use; Include interim rehabilitation where necessary to minimise the area exposed for dust generation; Include a program to monitor, independently audit and report on the effectiveness of the rehabilitation measures and progress against the detailed performance and completion criteria; and Build to the maximum extent practicable on the other management plans required under this consent. Note: The Biodiversity Management Plan and Rehabilitation Management Plan require substantial integration to achieve biodiversity objectives for the undisturbed and rehabilitated areas of the SCSS. 	 SLR (2014), Rehabilitation and Closure Plan, September 2014. Letter – DRE (2014), WCS Rehabilitation and Closure Plan, September 2014, 14 October 2014. Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. Letter – DRE (2015), Approval of Mining Operations Plan – Western Coal Services, 23 December 2015. Centennial (2014), WCS Rehabilitation Management Plan (WCS DA SSD-5579), 28 July 2014 – CCC, SCA, DPE, EPA, Forests NSW, LCC, OEH 	 Preparation a) Table 7 of the Rehabilitation and Closure Management Plan (SL comments and consultation process with DRE and DP&E. Evid with EPA, NOW, OEH, SCA, Forestry NSW the CC and LCC was b) A letter from DRE to WCS dated 14 October 2014 noted that W0 revised plan on 25 September 2014 following an initial submissis c) DRE approved the plan on 14 October 2014 noting that "the R& satisfactory taking into account the relatively short term approva covered". DRE also noted that the "Rehabilitation and Closure an addendum to the Springvale Colliery Mining Operations Plan initially approved by DRE on 24 May 2010 and which expires in DRE required that a new MOP for WCS be prepared and submit than 30 September 2016. d) Section 4.3.4 described how the rehabilitation of the site would be implementation of the Biodiversity Management Plan. e) Section 10 included detailed performance and completion criteria performance of the rehabilitation of thesite. f) Section 7 to 9 described the measures that would be implement compliance with the relevant conditions of this consent, and add rehabilitation including facility closure, final landform and final lat g) Section 8 included a program to monitor, independently audit a effectiveness of the rehabilitation measures and progress agains performance and completion criteria. i) WCS management noted that the new WCS MOP (Centennial, 2015) address rehabilitation at the site. The 2015 / 2022 MOP approval letter from DRE on 23 December 20 Rehabilitation and Closure Plan ceases to have effect on the date of (i.e. 23 December 2015). DRE also required that WCS submit an up Cost Estimate by 31 March 2016. Evidence of preparation for submit Rehabilitation Cost Estimate by 31 March 2016 was not available for the site inspection (3 February 2016). Refer to Condition 3.43 and 3.44 for implementation of the Rehabilitation Management Plan appeared to have been included and expanded up
4.1	NOTIFICATION OF LANDOWNERS	Letter – Centennial (2014), Western Coal Services	a) A letter from Centennial (Centennial, 2014) to the landowner list available for review. The letter notified the landowner they that
	 a) Notify in writing the owners of: the land listed in Table 1 of Schedule 3 that they have the right to require the Applicant to acquire their land at any stage during the development; and any residence listed in condition 2 of Schedule 3, that they have the right to require the Applicant for additional noise mitigation measures to be installed at their residence at any stage during the development; b) Notify the tenants of any mine-owned land of their rights under this consent; and c) 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 ELS identify that durt 	Upgrade Project, 30 April 2014.	 request Springvale for additional noise mitigation measures to b residence at any stage during the development. Additionally, the they have the right to require Springvale to acquire their land at development. b) WCS management reported that there are no tenants on mine o c) A copy of the NSW Health fact sheet entitled "Mine Dust and Yo have been provided to the owner listed in Table 1. This condition was found to be compliant given the intent of the letter

emissions generated by the development are likely to be greater than the relevant air

quality criteria in Schedule 3 at any time during the life of the development.

Compliant

R, 2014) details the lence of consultation as sighted. CS had submitted ion in July 2014. CP is considered to be al period which is . Management Plan is n (MOP) which was 20 November 2016". itted to DRE no later

be integrated with the

ia for evaluating the

ted to ensure dress aspects of nd use. sary to minimise the

and report on the st the detailed

2015) supersedes the of the MOP

15 noted that the f the MOP approval odated Rehabilitation ission of a r review at the time of

ation and Closure

and Closure pon in the MOP.

ted in Table 1 was they have the right to e installed at their ey were notified that any stage during the

Compliant

wned land. ou" did not appear to

r to the landowner.

Developme	nt Consent SSD-5579		
Condition No.	Condition	Evidence Source	Comment / Finding
4.2	 Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended dust and/or noise criteria, or for any of the land listed in Table 1 that is subsequently purchased by the Applicant, the Applicant shall: 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 b) Advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Director-General. 	-	WCS management reported that no tenancy agreements had been a condition was considered Not Applicable (not triggered).
4.3	 As soon as practicable after obtaining monitoring results showing: An exceedance of any relevant criteria in Schedule 3, the Applicant shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria; and An exceedance of the relevant air quality criteria in Schedule 3, the Applicant shall 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). 	 Centennial Letters to Residents, Centennial Springvale Noise Monitoring program, dated 27 August 2015 Centennial Letters to Residents, Centennial Springvale Noise Monitoring program, dated 23 April 2015 Centennial Letters to Residents, Centennial Springvale Noise Monitoring program, dated 22 April 2015 	Letters addressed to eight residents dated 27 August 2015 were sign noted that there had been noise monitoring exceedances at location and NM7. Monitoring results at the affected locations were provided to residents were also available dated 22 and 23 April 2015 notifying exceedances. Refer to Condition 13, Schedule 3 of SSD-5579 for air quality criteria
4.3	 INDEPENDENT REVIEW If an owner of privately-owned land considers the development to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Director-General in writing for an independent review of the impacts of the development on his/her land. If the Director-General is satisfied that an independent review is warranted, then within 2 months of the Director-General's decision the Applicant shall: a) Commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to: consult with the landowner to determine his/her concerns; conduct monitoring to determine whether the development is complying with the relevant criteria in Schedule 3; and if the development is not complying with these criteria, then identify the measures that could be implemented to ensure compliance with the relevant criteria; and b) Give the Director-General and landowner a copy of the independent review. 	-	No requests were reported to have been received hence this condition Applicable (not triggered).

Compliance Status & Recommendation

agreed hence this

Not Activated

ghted. The letters ns NM4, NM1, NM6 I in the letters. Letters of noise criteria

Compliant

ia.

tion was considered Not Not Activated

Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding	
4.5		-	No written requests were reported to have been received hence this	
	Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant shall make a binding written offer to the landowner based on:		considered Not Applicable (not triggered).	
	 the Applicant shall 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 development, 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 under Schedule 3; b) the reasonable costs associated with; relocating within the Lithgow local government area, or to any other local government area determined by the Director-General; 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 Applicant 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 Director-General for resolution. Upon receiving such a request, the Director-General will request the President of the NSW Division of the Australian Property Institute 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			
	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 Director-General 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 Director-General 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 determination, and any other relevant submissions.			
	Within 14 days of this determination, the Applicant shall make a binding written offer to the landowner to purchase the land at a price not less than the Director-General's determination.			
	If the landowner refuses to accept the Applicant's binding written offer under this Condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Director-General determines otherwise.			
4.6	The Applicant shall pay all reasonable costs associated with the land acquisition process described in Condition 5 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.	-	Not Applicable (not triggered)	



condition was

Not Activated

Not Activated

Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding	
5.1	 Environmental Strategy The Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Director-General. This strategy must: a) be submitted for approval to the Director-General within 6 months of the date of this approval; b) provide the strategic framework for the environmental management of the development; c) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; k) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development; k) describe the procedures that would be implemented to: k keep the local community and relevant agencies informed about the operation and environmental performance of the development; resolve any disputes that may arise during the course of the development; respond to any non-compliance; respond to 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. 	 Letter – DP&E (2015), WCS Environmental Management Strategy, 29 May 2015. Centennial (2014) Environmental Management Strategy, September 2014. 	 WCS has developed an Environmental Management Strategy (the Strawith Condition 5.1, Schedule 5 of SSD-5579. The following was noted concerning the Strategy: a) The Strategy was submitted to the Director-General for approval of The Director-General approved the Strategy on the 29 May 2015 b) Section 1.21 of the Strategy provided the strategic framework and overview of the Environmental System, Environmental Managemen Strategy included, but was not limited to sections addressing impli operation, roles, responsibilities, training, communication, operatic emergency preparedness and response. MCW Environmental co to generally provide the strategic framework for the environmental site. c) Section 3 sets out the statutory requirements of the development in Condition 5.1(c). d) Section 5.1 sets out resources, roles, responsibilities, authority an environmental management of the Development. e) section 5.3 described the process for managing communinformation; section 5.3.3 described how to manage complaints section 5.3.3 described the dispute resolution process section 6.4 addressed non-compliances and that these wa accordance with the CIMOS 006 Incident Response M (PIRMP) as the principal document for managing enviror f) Appendix 2 included SSD-5579 and EPL's 3607 (Springu 467 (Angus Place). No other plans or programs were incos Strategy. Reference to plans required by SSD-5579 was 5.4.1 (p.23). Appendix 2 included Figures of environmental monitoring noise, surface water and groundwater. Section 6.2.2 add environmental monitoring. 	

rategy) in accordance Compliant

on 2 October 2014. (DP&E, 2015). l included an ent Plans. The lementation and ional control and onsiders these topics I management of the

in accordance with

nd accountabilities for

nity issues and

would be managed in ndard and

Management Plan nmental incidents.

vale Colliery) and ncluded in the as made in Section

g locations for dust, dressed

procedures will be

Development Consent SSD-5579			
Condition No.	Condition	Evidence Source	Comment / Finding
5.2	 Adaptive Management The Applicant shall assess and manage development-related risks to ensure that there are no exceedances of the criteria and/or performance measures in this consent. 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 Applicant must, at the earliest opportunity: d) Take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur; e) 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 f) Implement remediation measures as directed by the Secretary, to the satisfaction of the Director-General. 	 Letter – Centennial (2015), WCS (SSD 5579) – Adaptive Management, 1 September 2015. Hatch (2016), Noise Assessment and Control Advice for Conveyor OL1 and Transfer Point OL1 to OL2, Ref: H350529-0000-07-124- 0001, Rev B. 	 Exceedences of noise criteria has occurred as discussed in conditions Noise e.g. Condition 7 Schedule 3. Centennial wrote to the DP&E on 11 November 2015 and provided an the noise management at the WCS site. The letter noted that Centern Had engaged a Group Stakeholder Engagement manager in July Will update the Noise Impact Assessment for WCS and that an ap the WCS DC will be submitted during 2016. A study supporting the identification of on-site mitigation measures be commissioned by 30 December 2015. Centennial acknowledged that DP&E had requested monthly noise corr but noted that it was in the process of developing a regional noise morr intends to rationalise its monitoring program across the Lidsdale/Walle regional plan would address noise and management requirements for letter indicated that the regional plan is due for submission by 21 Febru was not aware of the current status of the regional plan as this was beil Centennial corporate. It is noted that WCS had engaged a noise consultant to conduct a noise conveyor OL-1 and the transfer point for OL-1 / OL-2 (Hatch, 2016) at the timspection. WCS reported on 15 March 2016 that revised noise model received at this time and would support further investigations into appr controls.

were considering the strategies provided in the report (Hatch, 2016) at the time of the site inspection and other noise modelling and assessment reports conducted by Consultants for WCS and Centennial since this time.

Compliance Status & Recommendation

above relating to

update concerning nial:

/ 2015. pplication to modify

es was scheduled to

compliance reporting onitoring program as it llerawang region. The or the WCS site. The oruary 2016. SSCS being prepared by

ise assessment for o further understand Centennial were time of the site lelling had just been propriate noise

Not Verified

Developme	Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding		
5.3	 Management Plan Requirements The Applicant shall 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; the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance of the development; impacts and environmental performance of the development; 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 development over time; g) a protocol for managing and reporting any: incidents; complaints; non-compliances with statutory requirements; and exceedances of the impact assessment criteria and/or performance criteria; and h) a protocol for periodic review of the plan. 	 Pacific Environment Pty Ltd (2014), Western Coal Services Air Quality Management Plan, 30 July 2014, Ref: 08866. SLR (2015) Western Coal Services Construction Traffic Management Plan Associated with the Upgrade of the Coal Reject Emplacement Area, August 2015, Ref: 630.11117- 2. RPS (2014), Centennial's Western Holdings Aboriginal Cultural heritage Management Plan, 2014, Ref: PR121000; Final September 2014. RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Centennial (2014), Noise Management Plan Western Coal Services, July 2014. Centennial (2014) Environmental Management Strategy, September 2014. 	 Management plans have been prepared against the requirements of th a) Where required, plans were observed to include baseline data speption being addressed, for example the Noise Management Plan (Table Management Plan (Section 9) and Air Quality Management Plan (Section 9) and State legislation; a brief introduction that included a summary of the relevan requirements including Development Approval, reference (where relevant) and State legislation; relevant limits or performance measures/criteria were not the plans reviewed. For example the Noise Management noise impact assessment criteria (Table 4). specific performance indicators were generally included in was clear what the thresholds were and how they would I example the Air Quality Management Plan long and short criteria. The plans appeared to provide sufficient informa implementation and management measures; however, the consistency when referring to areas of the site. For exam Rehabilitation and Closure Plan referred to 'Domains' but used in other plans. Given the size and complex nature of in naming/references would be beneficial. Residential referred to by different names when comparing plans, for Management Plan referred to 'NM' locations. c) The Noise Management Plan referred to 'NM' locations. c) The Noise Management Plan may be superseded by a regional Ce Management Plan. d) Requirements to monitor and report were included the plans. Role responsibilities for conducting actions were provided; however, the limited in detail. It was not always clear who was responsible for ir mitigation measure or plan requirement. Reporting requirements wplans. e) It was not always clear in the plans how unpredicted impacts and		

- Rehabilitation and Closure Plan included TARPs to manage unpredicted impacts. Plans generally included a protocol for managing and reporting incidents, complaints, f) non-compliances with statutory requirements and exceedances of the impact assessment criteria and/or performance criteria.
- Plans including, but not limited to the Noise Monitoring Program, Water Management g) Plan and Rehabilitation and Closure Plan included a protocol for periodic review.

nis Condition (S5.3).

ecific to the issue(s) e 3), Water (Section 4).

ant statutory es to the EPL's

ted to be included in t Plan included

in tables so that it be achieved. For rt-term assessment ation to understand here was a lack of nple the t these were not

of the site continuity eceivers were also r example to Noise Quality

sting or future valls. It is noted that entennial Noise

es and

ese were generally implementing a were included in the

their consequences w relevant impact ent Plan and

Compliance Status & Recommendation

Compliant

Recommendation

REC-2016-37 - Ensure there is consistency in naming convention of areas of the WCS in the management plans (i.e. Domains).

REC-2016-38 - Ensure the naming convention for sensitive receivers is the same across all plans.

The above

recommendations are not considered to be needed to be done immediately and could be made during the next scheduled update of the Plans.

Developme	Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding		
5.4	 Annual Review By the end of March each year, or other timing as may be agreed by the Director-General, the Applicant shall review the environmental performance of the development to the satisfaction of the Director-General. This review must: a) describe the development (including any rehabilitation) that was carried out in the past financial year, and the development that is proposed to be carried out over the next year; b) include a comprehensive review of the monitoring results and complaints records of the development over the past financial year, which includes a comparison of these results against the: relevant statutory requirements, limits or performance measures/criteria; requirements of any plan or program required under this consent; monitoring results of previous years; and relevant predictions in the EA; (identify any non-compliance over the past financial year, and describe what actions were (or are being) taken to ensure compliance; (identify any toricompliance over the past financial year and describe what actions development, and analyse the potential cause of any significant discrepancies; and describe what measures will be implemented over the curret financial year to improve the environmental performance of the development. 	 Centennial (2015-A), WCS – Annual Review 2014, 23 April 2015. Letter – Centennial (2015-B), WCS - Annual Review, 23 April 2015. Letter – Centennial (2015-C), WCS Annual Environmental Management Report, 27 February 2015. Letter – DP&E (2015), WCS – Annual Review 2014, 20 March 2015. 	 2014 Annual Review The Annual Review was submitted to DP&E on 27 February 2015 (C DP&E responded to WCS on 20 March 2015 requesting further infor concerning: Condition 17, Schedule 3 – Prepare and Implement a revised Ai Plan. Condition 4, Schedule 2 - Resubmit compliance performance inf 3.18 of the Annual Review. Condition 3, Schedule 3 – Implement best practice to minimise of operational and road noise. Provide detailed plan of noise mitig Condition 3, Schedule 4 - Demonstrate compliance with notifyit landowners. Centennial responded to DP&E in a letter dated 23 April 2015 (Center that management plans where requested had been updated and wer letter. The Centennial letter also included noise information as reque the use of directional noise monitoring and engagement with landow should be required at properties citing the installation of double glazil location NM7. The following is noted concerning the 2014 Annual Review: a) The 2014 Annual Review included descriptions of the developm reporting period (Section 2). b) The 2014 Annual Review included monitoring results for the cale provided a comparison against statutory requirements were provers of a sincluded trends in the monitoring data for the review perior 3 included trends in the monitoring data for the review for the final sciences were noted in the 2014 Annual Review for the final science of of the Annual Review. These included, but were not line "Continuation of the upgrade to the water management sciences and DML Dam; Further consultation with Energy Australia regarding the provided a comparison with Energy Australia regarding the program and DML Dam; Further consultation with Energy Australia regarding the program and DML Dam; Further consultation with Energy Australia regarding the program and DML Dam; Freiparation and approval of the new MOP; and Continuation of the Centennial Western Region CCC". 		

Compliant

Centennial, 2015-C. mation from the site

ir Quality Management

formation for Table

construction, ation measures. ing potential

ennial, 2015) noting ere attached to the ested by DP&E noting ners if attenuation ng at residential

ents during the

endar year that vided in Section 3. Review and included ensure compliance. eriod. e reporting period. were included in imited to: tem; ciated with Cooks

oposed ash

EFA monitoring

e process of being

Developme	Development Consent SSD-5579				
Condition No.	Condition	Evidence Source	Comment / Finding		
5.5	 Revision of Strategies, Plans And Programs Within 3 months of: a) the submission of an annual review under Condition 4 above; b) the submission of an incident report under Condition 7 below; c) the submission of an audit report under Condition 9 below; or d) any modification to the conditions of this consent (unless the conditions require otherwise), the Applicant shall review the strategies, plans, and programs required under this consent, to the satisfaction of the Director-General. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Director-General. Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development. 	-	WCS management reported that requirements to revise strategies, had not been triggered during the audit period.		
5.6	 Community Consultative Committee Within 3 months of the date of this consent, the Applicant shall establish and operate a regional Community Consultative Committee (CCC) for the development in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects (Department of Planning, 2007, or its latest version), and to the satisfaction of the Director-General. This CCC is to service this development and any other approved project and/or development operated by the company in the Wallerawang district. Notes: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent. In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Applicant, Council, recognised environmental groups and the local community. 	 Letter - Centennial (2012), Proposed Combined Angus Place, Springvale CCC, 25 May 2012. Letter - DP&E (2012), Proposed Combined Angus Place, Springvale CCC, 6 June 2012. CCC Meeting Minutes - October 2015. CCC Meeting Minutes - April 2015. CCC Meeting Minutes - October 2015. CCC Meeting Minutes - October 2015. CCC Meeting Minutes - October 2015. CCC Meeting Minutes - October 2014. 	 Centennial notified DP&E of the Centennial Coal's Western Commu Committee on 25 May 2012, prior to the Project Approval. The Direct the combined CCC on 6 June 2016. The CCC meets every six months. Three CCC meetings have been Development Approval in April 2014. Centennial operate a combined CCC whereby other Centennial sites are included in the meetings (i WCS, Lidsdale Siding). CCC meetings were held on the following dates during the audit per 15 October 2015; 1 April 2015; and 15 October 2014. 		
5.7	REPORTING Incident Reporting The Applicant shall immediately notify the Director-General and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incidents associated with the development, the Applicant shall notify the Director-General and any other relevant agencies as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of the incident, the Applicant shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	-	 WCS management reported that there have not been any incidents a) Caused or threatened to cause actual or potential harm to the h human beings or to ecosystems that is not trivial harm to the er b) Breached or exceeded the limits or performance measures/crite Therefore no incident report has been provided to the Director-Generelevant agencies. The auditors sighted screenshots of the ECD Lotus Notes database summary of Centennial Coal defined Level 1-5 incidents for the auditors 5.2 of the Report for further details). 		
5.8	Regular Reporting The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	 Centennial – Springvale Coal Services http://www.centennialcoal. com.au/Environment/ Springvale-Coal-Services.aspx [Accessed: 2 February 2016 at 10:55am]. 	 Documents including, but not limited to the following were available Services website: Environment Management Plans Environmental Assessments Environmental Monitoring Data (Monthly) Development and Environment Approvals Environmental Management Reports Community Consultation documents including minutes and age 2014 meeting. A complaints register was available on the website. 		

Compliance Status & Recommendation

plans and programs

Not Activated

unity Consultative ector-General approved

Compliant

held since ed Western Coalfields i.e. Springvale, Angus,

riod:

Not Activated that have: health or safety of nvironment; and/or eria in this consent. eral and any other e that provided a dit period (Refer to

e on the Springvale Coal Compliant

endas for the October site.

Development Consent SSD-5579							
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation			
5.9	 INDEPENDENT ENVIRONMENTAL AUDIT By the end of December 2015, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: a) Be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General; b) Include consultation with the relevant agencies; c) Assess the environmental performance of the development and assess whether it is complying with the requirements in this consent, and any other relevant approvals, relevant EPL/s and/or Mining Lease/s (including any assessment, plan or program required under these approvals); d) Review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and e) Recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals. Note: This audit team must be led by a suitably qualified auditor and include experts in any field approximation. 	•	 This audit report and supporting documents address the requirements of Condition 9, Schedule 5 of SSD-5579. a) Centennial commissioned MCW Environmental to conduct the 2016 Independent Environmental Audit. The MCW Environmental audit team was approved by the DP&E to conduct the audit in a letter to Centennial dated 9 October 2015. The site inspection was conducted on the 4 and 5 February 2016. b) The 2016 IEA involved consultation with the following agencies: DP&E, DRE and EPA. c) The 2016 IEA assessed the environmental performance of the development against the requirements of SSD-5579, EPL 3607 (where relevant), EA SoC and plans and programs required by these approvals. d) The 2016 IEA included appropriate measures and/or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under the abovementioned approvals. Refer to Table 1-1 of the Report for further details. 	Compliant			
5.10	Within 3 months of the completion of this audit, unless the Director-General agrees otherwise, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.	-	Noted This is the first Independent Environmental Audit as required by SSD-5579.	Noted			
5.11	 Access to Information From the end of October 2013, the Applicant shall: a) Make copies of the following publicly available on its website: the EIS; all current statutory approvals for the development; approved strategies, plans and programs required under the conditions of this consent; a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; a complaints register, which is to be updated monthly; minutes of CCC meetings; the last five annual reviews; any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit; any other matter required by the Secretary; and b) Keep this information up-to-date, to the satisfaction of the Director-General. 	 Centennial – Springvale Coal Services http://www.centennialcoal. com.au/Environment/ Springvale-Coal-Services.aspx [Accessed: 2 February 2016 at 10:55am]. 	 a) Access to information appears to be in compliance with the requirements of this condition. The Springvale Coal Services website was reviewed and observed to contain the following information: Environment Management Plans Environmental Assessments Environmental Monitoring Data Development and Environment Approvals Environmental Management Reports Community Consultation documents including minutes and agendas for meetings. a Complaints Register was available on the website. The following plans and reports were available: Annual Environment Management Report 2014 Pollution Incident Response Plan Environment Protection Licence Monitoring Data was available on the website for the period April 2014 2013 through to December 2015. b) Information on the WCS website appeared to be up-to-date. 	Compliant			

Environme	ental Protection Licence	e 3607			
Condition No.	Condition			Evidence Source	Comment / Finding
A1.1	Administrative Contr This licence authorises premises specified in A classification, fee-base Unless otherwise furth activity is carried out m Scheduled Activity Coal Works Mining for Coal	ols the carrying out of the sch A2. The activities are listed ad activity classification and er restricted by a condition nust not exceed the maximu Fee Based Activity Coal Works Mining for Coal	heduled activities listed below at the according to their scheduled activity a the scale of the operation. of this licence, the scale at which the um scale specified in this condition. Scale >2,000,000 – 5,000,000 T handled >3,500,000 – 5,000,000 T produced	Centennial (2014), Lidsdale Siding Annual Review.	It was determined that this condition applies to Springvale Collier WCS operates at the development under SSD-5579 that specific receiving criteria. WCS production figures for the audit period we ROM coal handled was reported: d) 2014: 3,487,621 tonnes of ROM received. e) 2014: 2,311,037 tonnes of ROM coal processed. f) 2015: 3,853,628 tonnes of ROM received and processed. Based on the volume of coal going off-site, limited material stock site inspection and the tonnage volumes for 2014 and 2015 this of compliant.
A2.1	Premises or Plant to Which This Licence Applies The licence applies to the following premises: Springvale Colliery, Castlereagh Highway, Lidsdale, NSW 2790 ML 1303, ML 1323, ML 1326, <u>ML1352</u> , ML1537, ML1588, <u>MPL314</u> , EL6974, MLA326, A460, <u>CCL 733</u> , ML204, ML1319, ML564, CL394 AND CL361			-	Noted. CCL 733, ML1352 and MPI314 apply to WCS. The Auditors did not assess whether the site is operating wholly by the Lots stated in the licence.
A3.1	 Information Supplied to the EPA 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 <i>Protection of the Environment Operations (Savings and Transitional) Regulation 1998</i>; 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. 			-	Works appeared to be generally in line with the applicable sched scale/capacity relevant to WCS. The original licence application part of this audit as it was submitted by Springvale Colliery and n
A3.2	All works and activities must be undertaken in accordance with the project approval for Application Number 08_0223 as issued by the Planning and Assessment Commission, on behalf of the Minister for Planning and Infrastructure, on 3 May 2013. The conditions in this project approval take precedent over any information previously supplied to the EPA as part of the licence application in the event of a discrepancy.			-	It was determined that this condition applies to Springvale Collier The Development Consent for WCS is SSD-5579 and was grante compliance assessment against SSD-5579, Appendix A

	Compliance Status & Recommendation
ry only and not WCS. es processing and ere sighted. The following	Not Assessed
piled at the time of the condition was considered	
	Noted
within the areas defined	
luled activities and was not assessed as not WCS.	Compliant
ry only and not WCS.	Noted
ed on 4 April 2014. See	Refer to compliance assessment against DC SSD-5579.

Environmental Protection Licence 3607							
Condition No.	Condition				Evidence Source	Comment / Finding	Compliance Status & Recommendation
P1.1	Location of Monitoring/Discharge Points and Areas 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. Air		 Letter – Centennial (2014), WCS Air Quality Management Plan, 31 July 2014 (EPA). Letter – Centennial (2014), WCS Air Quality Management Plan, 4 August 2014 (DP&E). Pacific Environment Pty Ltd (2014) Wastern Cool Services 	 WCS dust monitoring requirements are managed by criteria specified in SSD-5579. Reference is made to Condition 13 in Schedule 3 of SSD-5579. Three deposition dust gauges (DG3, DG4 and DG5) are located at WCS. One High Volume Air Sampler (measuring both PM₁₀ and Total Suspended Particulates) located at Pine Dale Mine. One Tapered Element Oscillating Microbalance (TEOM) located in the vicinity of Blackmans Flat. 	Compliant		
	EPA ID #	Type of Monitoring Point	Type of Discharge Point	Local Description	 Air Quality Management Plan, 30 July 2014, Ref: 08866. Dust Risk Report 00:00 01/01/2016 - 12:00 03/01/2016 Dust Risk Report 00:00 13/01/2016 - 12:00 15/01/2016 	The HVAS provides real-time measurement of airborne PM ₁₀ concentration levels and TSP. Real-time PM ₁₀ concentrations are reported online, along with real-time meteorological data such as wind speed and direction, for proactive dust management.	
	8	Dust Monitoring network	-	Dust deposition gauge monitoring network as shown on Springvale Coal's Figure 3.3.1 titled Dust Monitoring Locations, forwarded to the EPA on 20/6/01		 Dust Risk Report 00:00 13/01/2016 - 12:00 15/01/2016 Ust Risk Reports were sighted dated 1 and 13 January 2016. The reports provide predications for dust events for day and night shifts in accordance with Section 8.1 of the AQMP. Events are ranked as Low, Medium, High and Extreme. 	

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. P1.2 -

Noted



Noted
Environme	ntal Prot	ection Licence 3607						
Condition No.	Conditi	on			E	Evidence Source	Comment / Finding	
P1.3	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. Water and Land				•	 ALS (2016), Springvale LDP006 EC - 1 April 2014 through to 1 February 2016 [ALS Portal], 15 February 2016. 	Only LDP-006 and LDP-007 (EPA ID No's 6and 7) apply to WCS. Monthly environmental monitoring reports from April 2014 to January on the WCS website for LDP006 and LDP007. The monthly report Water Quality results for both LDPs.	
	EPA ID #	Type of Monitoring Point Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Type of Discharge PointDischarge to Waters Discharge Quality Monitoring Volume Monitoring	Local Description Overflow from Dam 3 at Springvale pit top labelled as LD001 on Springvale Coal's Diagram titled "Discharge Points LD001, LD002 & LD003", dated 18-November-99.	•	 Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Site observations. ALS Website (2015) Lidsdale Mine LDP004, Available at: https://portal.alsglobal.com/we b.htm [Accessed 27/01/2016 at 14:25hrs] Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.Xls – 08/01/2015 to 03/12/2015. EPL 3607 Annual Return ALS (2016), Springvale LDP006 Rainfall in MM [ALS Portal], 27 January 2016. GHD (2016), Lambert Gully REA Operation and Maintenance Manual for REA and A Pit Maintenance Upgrade, February 2016, 21/24377. ALS Coal Services December 2015 - 24005453.Xls. ALS Coal Services November 2015 - 24005423.Xls ALS Coal Services November 2014 - 24005040.Xls. ALS Coal Services November 2014 - 24005040.Xls. ALS Coal Services November 2014 - 24004999.Xls. ALS Coal Services November 2014 - 24004999.Xls. April 2014 to October 2014 Water.Xls 	 KFS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Site observations. ALS Website (2015) Lidsdale Mine LDP004, Available at: 	
	2	Discharge to utilisation area	-	Area labelled as LD002 on Springvale Coal's Diagram titled "Discharge Points LD001, LD002 & LD003", dated 18-November-99.	•			
	4	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Emergency discharge point on unnamed creek leading to Wolgan River, labelled as LDP 004 on State Forest's Figure 3.2.4 titled 'Softwoods Region Occupation Permit No. 02349.	•			
	5	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Emergency discharge point on unnamed creek leading to Wolgan River, labelled as LDP 005 on State Forest's Figure 3.2.4 titled Softwoods Region Occupation Permit No. 02349.	•			
	6	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Drain from final filter lagoon at Western Main labelled as LD006 in Springvale Coal's Diagram titled Discharge Point LD006, dated 18- November-99.	•			
	7	Discharge to Waters Discharge Quality Monitoring	Discharge to Waters Discharge Quality Monitoring	Duncan Street coal conveyor transfer drain from final filter lagoon at Western Main labelled as LD007 in Springvale Coal's Diagram titled as LD007, dated 18- November-99	•			
	9	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Centennial's Springvale Water Transfer System bypass point east of Kerosene Vale Ash Dam.	•			
	10	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Discharge to Waters Discharge Quality Monitoring Volume Monitoring	Emergency/maintenance discharge from Centennial's Springvale Water Transfer Scheme upstream of the settling ponds.				

Note: Licensed discharge points 4 (LD4) and 5 (LD5) are only to be used for emergency discharges as defined in condition E1.1.

Compliance Status & Recommendation

Compliant

uary 2016 were available orts contained Surface

Environme	ntal Protection Licence 3607							
Condition No.	Condition	Ev	idence Source	Comment / Finding				
L1.1	LIMIT CONDITIONS Pollution of Waters 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.	•	ALS (2016), Springvale LDP006 EC - 1 April 2014 through to 1 February 2016 [ALS Portal], 15 February 2016. RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Site observations. ALS Website (2015) Lidsdale Mine LDP004, Available at: https://portal.alsglobal.com/we b.htm [Accessed 27/01/2016 at 14:25hrs] Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.XIS – 08/01/2015 to 03/12/2015. EPL 3607 Annual Return ALS (2016), Springvale LDP006 Rainfall in MM [ALS Portal], 27 January 2016. GHD (2016), Lambert Gully REA Operation and Maintenance Manual for REA and A Pit Maintenance Upgrade, February 2016, 21/24377. ALS Coal Services December 2015 - 24005453.XIs. ALS Coal Services November 2015 - 2400540.XIs. ALS Coal Services November 2014 - 24005040.XIs. ALS Coal Services November 2014 - 24004999.XIs. April 2014 to October 2014 Water.XIs ALS (2016), Springvale LDP006 Rainfall in MM [ALS Portal], 1 March 2016 [for December 2014].	 Under a former pollution study requirement of the Springvale EPL, Assessment of Potential Impacts of Pollutants at LDP-006WCS was LDP-006 (by sampling and obtaining results by laboratory analysis range of pollutants at the upstream and downstream locations with A note to the condition stated <i>"It is the EPA's intention to place wat these pollutants on all discharges via LDP6 based on the results of</i> Following the collection of additional monitoring results up until 31 had to undertake an assessment of the pollutants detected in wate site via LDP6 in accordance with ANZECC water quality guidelines assessment to the EPA by 28 February 2014. GHD (GHD, 2014), titled 'Neubecks Creek ANZECC and ARMCANZ 2000 Assessment for the pollutants detected in wate site via LDP6 in accordance with water quality monitoring results provid period for the requested analytes comprising Conductivity, Dissolve manganese, Dissolved nickel, Total nickel, Total nardness, Dissolve The report also generated Site Specific Trigger Values (SSTVs) an Limits for Conductivity, Dissolved iron, Dissolved manganese, Diss and Dissolved zinc. SSTVs and proposed discharge limits were im Water Management Plan (RPS 2014). The above program (Condition U3) was removed from EPL 3607 ir 2014 EPL variation. The EPA did not place water quality limits in the pollutants at LDP6 in the future. On the basis that the EPA has required WCS to monitor for various these to the EPA; with the intent to create discharge creation, as been given by the EPA to other analytes outside have discharge limits in the current EPL. Given the above and this EPA, it is considered inappropriate to make a finding relevant to co condition. The status of compliance for this condition is therefore of Verified. 				

Condition U3: as required to monitor) the concentration of a uired to monitor for the hin Neubecks Creek.

ter quality limits for f this assessment."

December 2013 WCS r discharged from the and provide the completed a report nt Environment s Condition U3. Refer

ded over the monitoring ved iron, Dissolved ved zinc and Total zinc.

nd proposed Discharge solved nickel, hardness, ncluded in the sites

n the 10 December the EPL for these ne date of the audit). It arge points on EPL 3607 retion to provide limits

analytes and report on vident that of the analytes that consideration by the ompliance with this considered to be Not

Compliance Status & Recommendation

Not Verified

REC-2016-26 – If required by the EPA, or as part of establishing a separate EPL for WCS, modify licence limits for discharges from LDP-006 as appropriate.

Refer to REC-2016-28, REC-2016-29, REC-2016-30 (SSD-5579, Condition 23, Schedule 3)

Environme	Environmental Protection Licence 3607					
Condition No.	Condition	Evidence Source	Comment / Finding			
L2.1	Concentration Limits For each monitoring/discharge point or utilisation area specified in the table\s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.	•	A result of 148 Nephelometric Turbidity Units (NTU) was recorded criteria of 50 NTU on 21 April 2015 at LDP-006. During the sam 63 mg/L was recorded against an EPL 3607 criteria of 30 mg/L. considered to be exceedances as Condition L2.5 of EPL 3607 st concentration limits stipulated by condition L2.1/L2.4 for EPA idea deemed not to apply when the discharge from the stormwater co- dams) occurs solely as a result of rainfall measured at the premi- the Washery and Stockpile Sediment dams, a total of 56 millime consecutive 5 day period'. Rainfall recorded at LDP-006 in the f discharge was 61 mm (ALS, 2016).			
			56 mm of rain occurred in the five days prior to a discharge from 2016 (ALS, 2016). WCS management reported that there were no discharges from Environmental Monitoring Reports April to December 2014 and			
		_	indicated there had been no discharge from LDP-007.			
L2.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.		One exceedance of EPL 3607 pH criteria was recorded at LDP-(2014 (6.46). WCS noted that the September 2014 exceedance rainfall, 50.5mm that resulted in the discharge of surface water friemplacement areas. Centennial reported the exceedance in the even though rainfall criteria of 56 mm as specified in EPL 3607 (exceeded.			
			There was a pH exceedance at LDP-006 on 8 December 2014 c occurred in the five day period prior to the exceedance,			
			There was a pH exceedance at LDP-006 on 12 December 2014 17.6 mm occurred in the five day period prior to the exceedance			
			There was no pH exceedance for 2015 from the data reviewed (03/12/2015). The EPL range for pH at LDP-006 is 6.5 to 8.5. W mitigated the issue of surface water flow over reject emplacement surface water flows from these areas, maintaining freeboard in the and intercepting surface runoff to Cooks Dam rather than LDP-0			
			The ALS online portal allows Lidsdale management to view 'live' 006 as well as rainfall data. Given the two pH exceedances at L 2014 this condition was found to be non-compliant.			
L2.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.	-	Refer to Condition L1.1.			

sр



Compliance Status & Recommendation

Compliant

ed against an EPL 3607 ne event a TSS result of These results were not tates that "The entification point 6 is ontrol structures (sediment ises which exceeds: a) for etres of rainfall over any five days before the

LDP-006 on 23 January

LDP-007. The monthly January to January 2016

006 on 10 September was the result of high from the reject 2014 Annual Return, Condition L2.5 was not

of 6.39. No rainfall

of 6.11. Rainfall up to

(08/01/2015 to VCS reported they ent areas by diverting the Main Sediment Pond 006.

data concerning LDP-LDP-006 in December

Non compliant
Non-compliant

Noted

Environmental Protection Licence 3607					
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
L2.4	Water and/or Land Concentration Limits	-	Refer to Conditions L2.1 to L2.4.	-	

Point 6

Pollutant	Units of Measure	50 Percentile Concentration Limit	90 Percentile Concentration Limit	3DGM Concentration Limit	100 Percentile Concentration Limit
Oil & Grease	Milligrams per Litre	-	-	-	10
рН	рН	-	-	-	6.5 – 8.5
TSS Note 1	Milligrams per Litre	-	-	-	30
Turbidity	nephelometric turbidity units	-	-	-	50

Point 7

Pollutant	Units of Measure	50 Percentile Concentration Limit	90 Percentile Concentration Limit	3DGM Concentration Limit	100 Percentile Concentration Limit
Oil & Grease	Milligrams per Litre	-	-	-	10
рН	рH	-	-	-	6.5 – 8.5
TSS Note 1	Milligrams per Litre	-	-	-	30
Turbidity	nephelometric turbidity units	-	-	-	50

Note 1 Total Suspended Solids

- L2.5 The concentration limits stipulated by condition L2.1/L2.4 for EPA identification Point 6 is deemed not to apply when the discharge from the stormwater control structures (sediment dams) occurs solely as a result of rainfall measured at the premises which exceeds:
 - a) for the Washery and Stockpile Sediment dams, a total of 56 millimetres of rainfall over any consecutive 5 day period.
 - b) for the Main Sediment dam, a total of 29mm of rainfall over any consecutive 5 day period.

Note: A 56mm rainfall event is defined by the EPA endorsed publication "Managing urban stormwater: soils and construction" (Landcom 2004; 6-24) as the rainfall depth in millimetres for a 95th percentile 5 day rainfall event for "Lithgow" which is also consistent with the storage capacity (recommended minimum design criteria) for Type D sediment basins for mines and quarries (see Managing urban stormwater: soils and construction, Volume 2E, mines and quarries" (DECC, 2008).

Noted

Refer to Conditions L2.1 to L2.4.

MCW Environmental



Noted

Environme	ntal Protec	tion Licence 3607				
Condition No.	Conditior	1		Evidence Source	Comment / Finding	Compliance Status & Recommendation
L2.6	The conce identificati	entration limit for total suspended solids stipu on point 6 is deemed not to have been breac	lated by condition L2.1/L2.4 for EPA hed where:	-	Noted Refer to Conditions L2.1 to L2.4.	Noted
	 a) The water discharged is covered by condition L2.5; and b) The water discharged complies with the turbidity limit at the time of the discharge; and c) The EPA is advised within 3 working days of the completion of the sample testing and analysis as required by condition M2.3 of any results above the licence limit. 					
	Note: The discharge	purpose of condition L2.6 is to expediate the of the clarified water from the stormwater co	e assessment and subsequent ntrol structures (sediment basins).			
L3.1	 Volume and Mass Limits For each discharge point or utilisation area specified below (by a point number), the volume/mass of: a) liquids discharged to water; or; b) solids or liquids applied to the area; must not exceed the volume/mass limit specified for that discharge point or area 		-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed	
	Point	Units of Measure	Volume/Mass Limit			
	1	Kilolitres per day	10,000			
	4	Kilolitres per day	15,000			
	5	Kilolitres per day	15,000			
	9	Kilolitres per day	30,000			
L3.2	During em 15000kL/c points mus is equilibri	nergency discharges (as defined in condition day limit for points 4 or 5, however the combin st not exceed 30000kL/day. All practical step um of flow between these two discharge poir	E1.1) the licensee may exceed the ned total daily limit for these two s must be taken to ensure that there nts.	-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed
L4.1	Noise Lin	nits n the upcast ventilation shaft must not exceed	d an LAeq (15 minute) noise	-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed
L4.2	emission of Noise from residence	criterion of 35 dB(A), except as expressly pro n the premises is to be measured or compute to determine compliance with condition L4.1	vided by this licence. ed at the nearest or most affected	-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed
L4.3	The noise except: a) during b) under	emission limits identified in this licence apply g rain and wind speeds (at 10m height) great "non-significant weather conditions".	y under all meteorological conditions er than 3m/s; and;	-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed
	Note: Field Industrial N	meteorological indicators for non-significant weath loise Policy, Chapter 5 and Appendix E in relation	ner conditions are described in the NSW to wind and temperature inversions.			



ondition D.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation
	OPERATING CONDITIONS Activities must be Carried Out in a Competent Manner 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.	 Site observations Environmental Inspection Sheets – 07/01/2015, 20/01/2015, 16/02/2015, 03/03/2015, 26/03/2015, 21/05/2015, 13/07/2015, 21/05/2015, 13/07/2015 ALS Station History – Hydrometric Monitoring - 26/06/2015, 28/07/2015, 11/08/2015 ALS Station History – Level / Flow / QQ – LDP004 - 20/02/2015, 09/12/2014, 11/09/2015 ALS Station History – Level / Flow / QQ – LDP004 - 20/02/2015, 09/12/2014, 11/09/2015 ALS Station History – Level / Flow / QQ – LSVDP006 – 09/12/2014, 10/04/2015, 16/06/2015, 11/09/2015. ALS (2015), Lidsdale Siding Hydrometric Operation Maintenance And Data Dissemination Report for 2015 December 2015. Quarterly Service Reports – 02/12/2015, 02/09/2015, 06/05/2015, 03/03/2015, December 2014, 27/05/2014, 11/02/2014. GHD (2016), Lambert Gully REA Operation and Maintenance Manual for REA and A Pit Maintenance Upgrade, February 2016, 21/24377. Statement of Attainments – Inspect and Report on Embankment and Dam Safety Work Order VL21284/ VL27345/ VL24410 - Daily Inspection 'A' Pit Emplacement Area. Work Order VL21284/ VL27345/ VL24410 - Daily Inspection 'Go Old Co- Disposal. REA Construction Environmental Inspection Sheet – 21/01/2016, 17/01/2016, 05/01/2016, 28/12/2015, 18/12/2015, 03/12/2015, 20/11/2015, 3/10/2015, 29/09/2015, 03/12/2015, 20/11/2015, 03/11/2015, 27/10/2015, 03/11/2015, 27/10/2015, 03/11/2015, 29/09/2015, 	 MCW Environmental did not complete a detailed assessment of this condition; however, make the following observations relevant to the condition. Plant and equipment used on site for environmental management included: Discharge water flow meters sampled by ALS. Sedimention drans, including dam telemetry checked by ALS. Sediment controls (rock dams). Dust suppression sprinklers. Weather Station One Tapered Element Oscillating Microbalance (TEOM) located in the vicinity of Blackmans Flat. Dust gauges. Spill response kits (sighted during site inspection). The Centennial system PULSE is used to generate work orders for specific tasks. ALS (2015), Lidsdale Siding Hydrometric Operation Maintenance and Data Dissemination Report 2015 ALS Station History (Level / Flow / QQ) records for LDP004 ALS Station History (Level / Flow / QQ) records for LDP006 A selection of Environmental Inspector for and were sighted that detailed inspections of the following infrastructure: main Sediment Pond, Discharge Pipe, Washery Sediment Pond, Stockpile Sediment Pond, Cocks Dam and LDP006. LDP-006 was visited and inspected four times in 2014 by ALS including, download of data, comparison of logged data to independently monitored data, cleaned equipment and solar panel, cleaned cipolletti notch and weir, replaced incumbent water quality sonde recompared logged data to independently monitored data and adjusted (ALS, 2015, p.5). Quarterly Service Reports were sighted for the effluent treatment systems at the Control Room and Lunch Room buildings. The PULSE Work Order system is used for general plant and maintenance and was observed during the site inspection. The S	Compliant



Environme	nvironmental Protection Licence 3607						
Condition No.	Condition	Evidence Source	Comment / Finding				
O3.1	Dust The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	 SLR Consulting Ambient Test Reports -610.11391.00400- TR4, 610.11391.00400-TR5, 610.11391.00400-TR6, 610.11391.00400-TR10, 610.11391.00400-TR11, 610.11391.00400-TR12 Pinedale Dust Data.xls - 23/03/2014 to 31/12/2015. WCS Dust Data.xls - 18/03/2014 to 23/11/2015 ^{Note 1}. Centennial (2015) Springvale Coal Services Environmental Monitoring Data, November 2015 Site observations. Pacific Environment Pty Ltd (2014), Western Coal Services Air Quality Management Plan, 30 July 2014, Ref: 08866. Annual Daily 24-hr Summaries for teom.xlsx - 1 January to 31 December 2015. WCS Community Complaints Register (April 2014 to December 2015). 	 Potential sources of significant dust emissions from the Site include. Unsealed/uncovered areas exposed to wind erosion including and stockpiles; Coal handling and dozer activities; Movement of vehicles on sealed and unsealed roads from geter Crushing, screening and preparation of product coal. To minimise dust emissions, the following measures were observed with those noted in the Air Quality Management Plan: Fixed sprinklers on the stockpile. Enclosure of conveyor transfer points. Coal reclaim from stockpiles via underground reclaim tunnel. Three quarter enclosed conveyors. Haul roads located off-site, although not in use at the time of sealed. Internal roads with the WCS were not sealed at the timspection. Water cart(s) as required. None of the sprinklers were observed to be in use at the time of the also noted that the site inspection was conducted on one wet day one dry day (5 February 2016), hence the site was not observed in Other site observations included: Three deposition dust gauges (DG3, DG4 and DG5) are located on the figh Volume Air Sampler (measuring both PM₁₀ and Tother Particulates) located at Pine Dale Mine. One Tapered Element Oscillating Microbalance (TEOM) located Blackmans Flat. Refer to Condition 13, Schedule 3 of SSD-5579, Appendix A for fuair quality. It is noted that MCW Environmental were not on-site during dry witherefore unable to assess site in dry windy conditions. 				
O3.2	Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.	-	It was determined that this condition applies to Springvale Colliery No haulage trucks were observed entering and leaving the premis inspection.				
O4.1	Effluent Application To Land Effluent application must not occur in a manner that causes surface runoff.	Site observations	It was determined that this condition applies to Springvale Colliery For the treatment of domestic wastewater WCS has two biocycle a Treatment Systems, one adjacent to the control room and one adj This unit was reported to be designed to cater for the Lamberts G well as the WCS personnel during the Open Cut mining operation areas were observed and no evidence of surface runoff from efflu observed during the site inspection.				
O4.2 O4.3	Spray from effluent application must not drift beyond the boundary of the premises.	Site observations Site observations	For the treatment of domestic wastewater WCS has two biocycle a Treatment Systems, one adjacent to the control room and one adj This unit was reported to be designed to cater for the Lamberts G well as the WCS personnel during the Open Cut mining operation onto native tree lots below the WCS office building.				
04.0	the applied effluent has dried.		WCS management reported that livestock are not allowed on-site. observed during the site inspection.				

	Compliance Status & Recommendation
de:	Compliant
g emplacement areas	Refer to REC-2016-35 and REC-2016-36 (Condition
eneral site activities, and	Appendix A)
ed on-site, consistent	
the site inspection, were time of the site	
he site inspection. It is / (4 February 2016) and in very dry conditions.	
ated at WCS. otal Suspended	
ated in the vicinity of	
urther details concerning	
eather and were	
y only and not WCS. ses during the site	Not Assessed
y only and not WCS. Aerated Wastewater ljacent to the main office. Gully Open Cut mining as	Not Assessed
n. No effluent irrigation uent application was	
	Not Assessed
Aerated Wastewater ljacent to the main office. Sully Open Cut mining as n. Effluent is irrigated	
y only and not WCS. e. No livestock were	Not Assessed

Environme	ntal Protection Licence 3607		
Condition No.	Condition	Evidence Source	Comment / Finding
O4.4	The quantity of effluent/solids applied to the utilisation area must not exceed the capacity of the area to effectively utilise the effluent/solids. For the purpose of this condition, 'effectively utilise' include the use of the effluent/solids for pasture or crop production, as well as the ability of the soil to absorb the nutrient, salt, hydraulic load and organic material.	Site observations	It was determined that this condition applies to Springvale Collier
O5.1	Waste Management There must be no incineration or burning of any waste at the premises.	Site observations	No evidence of incineration or burning was observed during the s
O5.2	The sediments from the settling ponds of the Springvale Delta Water Transfer Scheme must be disposed of lawfully.	-	It was determined that this condition applies to Springvale Collier
O6.1	Other Operating Conditions The storm water control structures (sediment dams) identified at condition L2.5 EPA identification Point 6 must be drained or pumped out as necessary to maintain each basins design storage capacity within 5 days following rainfall.	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Site observations. ALS Website (2016) Lidsdale Mine LDP004, Available at: https://portal.alsglobal.com/we b.htm [Accessed 19/02/2016 at 14:25hrs] Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.XIs – 08/01/2015 to 03/12/2015. EPL 3607 Annual Return ALS (2016), Springvale LDP006 Rainfall in MM [ALS Portal], 27 January 2016. GHD (2016), Lambert Gully REA Operation and Maintenance Manual for REA and A Pit Maintenance Upgrade, February 2016, 21/24377. Cooks Flow Total July 2014 to June 2015. 	 Approximately 7.4 ML/day of water is transferred from Cooks Dat (2014, p.24). WCS has commissioned an investigation into surface water man water control structures. The investigation is currently ongoing ar Management Plan was in the process of being developed at the trinspection. MCW Environmental understands that the new revise Plan will address the management of seepage including an asse and remedial options. The auditors observed water being pumped from Cooks Dam to the site inspection. The design storage capacity for the Washery and Stockpile Sedii Sediment dam were not available to review. The Centennial Lids (ALS, 2016) shows that there was a total of 8.6 mm of rain in the site inspection and 9.6 mm on the first day of the site inspection. The site water balance (RPS, 2014, Figure 12) notes that: The Washery Sediment Dam can pump water to the CHPP of Water can be pumped from SLG6 to the Retention Dam. The LDP-006 (approximately 0.29 ML/day). The Stockpile Sediment Dam can be discharged via pipework to a spillway that eventually reports to LDP-006. This condition was found to be compliant given WCS has the cap Washery and Stockpile Sediment dams and the Main Sediment of being prepared at the time of the site inspection. Freeboard in the main sediment dam is managed via hard pipe connec Cooks Dam. Freeboard in Cooks Dam is managed via pumping water
O6.2	Water discharged to comply with condition O6.1 may only be discharged to waters from those stormwater control structures (sediment dams) identified at EPA identification point 6 where the discharged water complies with the discharge limits stipulated at condition L2.1/L2.4 (and taking into consideration condition L2.5).	Site observations	LDP-006 is the only discharge point and data collected at this loc water discharges to the environment from the WCS site. Refer to Conditions L2.1 to L2.5.

	Compliance Status & Recommendation
y only and not WCS.	Not Assessed
ite inspection.	Compliant
y only and not WCS.	Not Assessed
m to DML Dam (RPS	Compliant
agement including storm ad a revised Water time of the site ed Water Management ssment of management	
the DML Dam during the	
ment dams and the Main solale weather station five days preceding the During the site ain Sediment dam were	
or overflows to SLG6. e Retention Dam flows to	
n or can pump water to Tank. the Retention Dam or via	
pability to pump out the lam following rainfall Plan was in the process	
tlet.	
ction and gravity feed to ng into DML Dam and os 506 and 508 dated	
to the washery.	
ation represents the only	Refer to Conditions L2.1 to L2.5.

Environme	nvironmental Protection Licence 3607					
Condition No.	Condition	Evidence Source	Comment / Finding			
M1.1	MONITORING AND RECORDING CONDITIONS Monitoring Records 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.	 ALS (2016), Springvale LDP006 EC - 1 April 2014 through to 1 February 2016 [ALS Portal], 15 February 2016. RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Site observations. Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – April to December 2015. LDP-006 Data Summary.XIs – 08/01/2015 to 03/12/2015. EPL 3607 Annual Return ALS (2016), Springvale LDP006 Rainfall in MM [ALS Portal], 27 January 2016. ALS Website (2016) Lidsdale Mine LDP004, Available at: <u>https://portal.alsglobal.com</u> [Accessed 16/02/2016 at 11.29hrs]. 	 Monitoring results are compiled and stored in MS Excel spread sh (LDP006 Data Summary.Xls – 08/01/2015 to 03/12/2015) and dus Data.xls – 23/03/2014 to 31/12/2015 - WCS Dust Data.xls – 18/03 Excel spread sheets were reviewed. The ALS online portal allows WCS management to view 'live' data The following data is available on the portal: Level (Metres) Discharge (Cumecs) Discharge (MI/Day) WaterTemp(DegC) pH Turbidity EC (uS/cm) Comp 25 C Environmental monitoring reports were available on the WCS web included but were not limited to noise, water and dust emission da It is considered that the monitoring records are maintained in com requirements of this condition and may be made available upon re officer. 			

Compliance Status & Recommendation

sheets. A water analysis ust (Pinedale Dust)3/2014 to 23/11/2015)

Compliant

ta concerning LDP-006.

bsite for review. Reports lata.

npliance with the requests of an authorised

Environme	ntal Protection Licence 3607		
Condition No.	Condition	Evidence Source	Comment / Finding
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. 	 Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.XIs – 08/01/2015 to 03/12/2015. EPL 3607 Annual Return ALS (2016), Springvale LDP006 Rainfall in MM [ALS Portal], 27 January 2016. ALS Website (2016) Lidsdale Mine LDP004, Available at: <u>https://portal.alsglobal.com</u> [Accessed 16/02/2016 at 11.29hrs]. SLR Consulting Ambient Test Reports –610.11391.00400- TR4, 610.11391.00400- TR4, 610.11391.00400- TR4, 610.11391.00400- TR4, 610.11391.00400- TR4, 610.11391.00400- TR4, 610.11391.00400- TR4, 610.11391.00400- TR1, 610.11391.00400- Se Monitoring, July 2014, Ref: 14271_R01 Global Acoustics, Environmental Noise Monitoring, September 2014, Ref: 14288_R01 Global Acoustics, Environmental Noise Monitoring, November 2014, Ref: 14356_R01 Global Acoustics, Annual Report, Environmental Noise Monitoring 2015, Ref: 15434_R02. 	 Monitoring results were sighted and available for the audit period. from April 2014 onwards. Records were available in Centennial's ECD management system Environmental Compliance Database. It is considered that the monitoring records are maintained in comrequirements of this condition and may be made available upon reofficer. The reporting of monitoring results in the Environmental Monitorin not always consistent and it was not clear to the reader if there was against EPL criteria. For example LDP-006 criteria was not specia a column noting 'Exceedance' was included while in others no ind was provided. The Electrical Conductivity (EC) Site Specific Trigger Value (SSTV in Table 11.1 of the Water Management Plan is 3,693 µS/cm. Mo for the period 1 April 2014 through to 5 February 2016 identified th EC exceedances of the Water Management Plan is 3,650 µS/cm. While the median result was 3,565 µS/cm. While the median result was 3,565 µS/cm. between 7 February 2016. However, the Plan also notes that "GHD (2014) to derive suitable SSTVs for a range or parameters to be applied i Wangcol Creek Far Downstream. Corresponding discharge limits proposed for the same parameters at LDP006 with a view to main Wangcol Creek Far Downstream to within the SSTVs. At the time assessment was under review by the EPA and as such, the proposed currently in use at the WCS site" (RPS, 2014, p.57).

Records were available

accessed via the WCS

npliance with the equest by an authorised

ng Monthly Reports was as an exceedance ified and in some reports dication of compliance

V) for LDP-006 as stated onthly EC data reviewed that there were 8 monthly e average result was April 2014 and 1 have undertaken a study to the water quality of have also been intain the water quality at the of writing, the SSTV osed SSTVs are not

Compliance Status & Recommendation

Compliant

REC-2016-39 - Ensure that there is consistency in the reporting and presentation of results in the Monthly Environmental Reports including the provision of EPL criteria to allow the reader to easily interpret results.

Refer to REC-2016-26 (Condition 20, Schedule 3, SSD-5579).

Environme	ntal Protection Licence 3607		
Condition No.	Condition	Evidence Source	Comment / Finding
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. Requirement to Monitor Concentration of Pollutants Discharged	 ALS – Certificate of Analysis, ES15379863 ALS Chain of Custody, 10 December 2015. Global Acoustics, Environmental Noise Monitoring Reports - July 2014, August 2014, September 2014, October 2014, November 2014, December 2014 ALS Coal Services December 2015 - 24005453.XIs. ALS Coal Services November 2015 - 24005423.XIs ALS Coal Services December 2014 - 24005040.XIs. ALS Coal Services November 2014 - 24005040.XIs. ALS Coal Services November 2014 - 24004999.XIs. 	The auditors sighted ALS monitoring data, indicating the: a) Date; b) Time; c) Point where sample taken; and d) Name of person collecting.
1012.1	Special Frequency 1 means every five days.		
M2.2	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:	 ALS (2016), Springvale LDP006 EC - 1 April 2014 through to 1 February 2016 [ALS Portal], 15 February 2016. RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Site observations. Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.XIS – 08/01/2015 to 03/12/2015. EPL 3607 Annual Return ALS (2016), Springvale LDP006 Rainfall in MM [ALS Portal], 27 January 2016. ALS Website (2016) Lidsdale Mine LDP004, Available at: <u>https://portal.alsglobal.com</u> [Accessed 16/02/2016 at 11.29hrs]. 	The auditors sighted raw data as well as monthly reports for the ye part of 2016 and observed that sample testing for conductivity, Oil Suspended Solids (TSS) had been taken on a monthly and daily (basis at WCS monthly via discharge. Sampling probes were observed at LDP-006 during the site inspect reviewed a selection of the monitoring (refer to evidence column) every monitoring requirement.

Compliance Status & Recommendation

Compliant

only and not WCS.

Not Assessed

Compliant

years 2014, 2015 and bil and Grease; pH; Total (during any discharge)

ection. The auditors) but did not check for

Environme	ntal Protection Licence 3607		
Condition No.	Condition	Evidence Source	Comment / Finding
M2.3	Air Monitoring Requirements	-	It was determined that this condition applies to Springvale Colliery only and not WCS.

Air Monitoring Requirements M2.3

Points 8

Pollutant	Units of Measure	Frequency	Sampling Method
Particulates Deposited matter	Grams per square metre per month	Monthly	AM-19



Environmental Protection Licence 3607					
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	

Water and/ or Land Monitoring Requirements M2.4

Point 6

Pollutant	Units of Measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Weekly during any discharge	Grab sample
Filterable Iron	milligrams per litre	Weekly during any discharge	Grab sample
Filterable Manganese	milligrams per litre	Weekly during any discharge	Grab sample
Oil and Grease	milligrams per litre	Weekly during any discharge	Grab sample
рН	рН	Weekly during any discharge	Grab sample
TSS Note 1	milligrams per litre	Monthly during discharge	Grab sample

Point 7

Pollutant	Units of Measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Weekly during any discharge	Grab sample
Filterable Iron	milligrams per litre	Weekly during any discharge	Grab sample
Filterable Manganese	milligrams per litre	Weekly during any discharge	Grab sample
Oil and Grease	milligrams per litre	Weekly during any discharge	Grab sample
рН	рН	Weekly during any discharge	Grab sample
TSS Note 1	milligrams per litre	Monthly during discharge	Grab sample

Note 1 Total Suspended Solids

Environme	Environmental Protection Licence 3607					
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation		
M3.1	 Testing Methods - Concentration Limits Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place. Note: The Protection of the Environment Operations (Clean Air) Regulation 2010 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW". 	 ALS – Certificate of Analysis, ES15379863. ALS Chain of Custody, 10 December 2015. ALS Coal Services December 2015 - 24005453.Xls. ALS Coal Services November 2015 - 24005423.Xls ALS Coal Services December 2014 - 24005040.Xls. ALS Coal Services November 2014 - 24004999.Xls. 	The dust monitoring spread sheet provide details of the methods of analysis. The ALS December 2015 spread sheet noted the testing method for deposited dust matter to be 3580.10.1 - AS 3580.10.1 - 2003 Methods for sampling and analysis of particulate matter - Deposited matter - Gravimetric method. A NATA certificate for ACIRL Pty Ltd indicated they were competent to operate in accordance with ISO/IEC 17025. Dust sampling (compositional analysis) is conducted by UQMP (The University of Queensland).	Compliant		
M3.2	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.	 ALS – Certificate of Analysis, ES15379863. ALS Coal Services December 2015 - 24005453.Xls. ALS Coal Services November 2015 - 24005423.Xls ALS Coal Services December 2014 - 24005040.Xls. ALS Coal Services November 2014 - 24004999.Xls. 	 WCS management reported using ALS as its laboratory and field testing contractor for water monitoring. ALS is NATA accredited laboratory (Accreditation No: 825, Warabrook, NSW). The monthly water analysis report from ALS to WCS as well as the dust monitoring spread sheet provide details of the methods of analysis. WCS management reported that no other method has been approved by the EPA in writing before any tests are conducted. 	Compliant		
M4.1	 Environmental Monitoring The licensee must ensure that the following meteorological parameters are monitored on site and the results recorded:- a) daily rainfall; b) daily evaporation; c) continuous wind speed and direction. 	ALS Website (2016) Springvale LDP-006, Available at: <u>https://portal.alsglobal.com</u> [Accessed 16/02/2016 at 12:45hrs]	The ALS portal demonstrated that the meteorological weather station was continuously monitoring the parameters specified in M4.1.	Compliant		
M5.1	Recording of Pollution Complaints 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.	 WCS Community Complaints Register (April 2014 / December 2015). EPL 3607 Annual Return Centennial (2015), WCS – Annual Review 2014, 23 April 2015. 	The WCS Complaints Register (PDF) available on the WCS website noted four complaints on three days (January, February and March 2015). The Annual Return for 2014 for EPL 3607 notes two low frequency noise complaints (however are understood to concern Springvale Colliery). The 2014 Annual Review (Centennial, 2015) noted that there were no environmental complaints during 2014 (Centennial, 2015, p.44).	Compliant		
M5.2	 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. 	 WCS Community Complaints Register (April 2014 / December 2015). EPL 3607 Annual Return Centennial (2015), WCS – Annual Review 2014, 23 April 2015. Centennial (2014) Environmental Management Strategy, September 2014. Incident, Incident Detail & Investigation Form - dated 28 January 2015, 5 February 2015 9 March 2015 and 24 March 2015 	 The Environmental Management Strategy included a blank Record of Pollution Complaint form. The form included the following fields: The date and time of the complaint; The method by which the complaint was made; Contact details of complainant; The nature of the complaint; and The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant. Noise related incident investigation reports dated 28 January 2015, 5 February 2015, 9 March 2015 and 24 March 2015 were available for review that included the above detail. 	Compliant		

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Environme	Environmental Protection Licence 3607						
Condition No.	Condition			Evidence Source	Comment / Finding	Compliance Status & Recommendation	
M5.3	The record of a comp	laint must be kept for at least 4 y	ears after the complaint was made.	ECD Lotus Notes Database	Auditors the ECD Lotus Notes database for the audit period which addresses the requirement to keep complaint data for at least four years.	Compliant	
M5.4	The record must be p	roduced to any authorised office	r of the EPA who asks to see them.	-	WCS management reported that no request has been received from EPA.	Not Activated	
M6.1	Telephone Complai	nts Line		-	Refer to Condition M6.2.	Compliant	
	The licensee must op purpose of receiving conducted at the prea the licence.	perate during its operating hours a any complaints from members of nises or by the vehicle or mobile	a telephone complaints line for the the public in relation to activities plant, unless otherwise specified in				
M6.2	M6.2 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.		 CCC Meeting Minutes – April 2015. Centennial Website: <u>http://www.centennialcoal</u>.com.au/Contact/Contact- Us aspx 	A Community information line (02 6355 9500) is maintained by WCS. The number reports to the WCS control room that is manned 24 hrs a day. The caller's details are recorded and passed on to the relevant Centennial member of staff. The Record of Pollution Complaint was observed in the control room during the site inspection. Four complaints were received in the period January to March 2015.	Compliant		
		<u>Us.aspx</u>	A presentation to the Centennial Western Region Community Consultative Community (CCC) for April 2015 identified that complaints were included as an agenda item and the telephone number for the community information line was tabled. It is noted that the CCC includes surrounding Centennial sites.				
M6.3	The preceding two co	onditions do not apply until 3 mon	ths after:	-	Noted	Noted	
	 a) the date of the issue of this licence or b) if this licence is a replacement licence within the meaning of the Protection of the <i>Environment Operations (Savings and Transitional) Regulation 1998</i>, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation. 		neaning of the Protection of the al) Regulation 1998, the date on which under clause 10 of that regulation.				
	Requirement to Mor	nitor Volume or Mass					
	For each discharge p	oint or utilisation area specified b	elow, the licensee must monitor:				
	a) the volume of liqb) the mass of solidc) the mass of poll	uids discharged to water or applie ls applied to the area; itants emitted to the air;	ed to the area;				
	at the frequency and	using the method and units of me	easure, specified below.				
	Point 7						
	Frequency	Units of Measure	Sampling Method				
	Daily during any discharge	Kilolitres per day	Estimate				
R1.1	REPORTING CONDITIONS Annual Return The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:		EPL 3607 Annual Return	MCW Environmental sighted the Annual Return for 2014; however, it is noted that Springvale Colliery is responsible for preparing and submitting the Annual Return. WCS management provide data to Springvale Colliery for their submission of the Annual Return. While not specifically allocated to WCS management in the Centennial structure, the	Compliant		
			Centennial (2015), WCS – Annual Review 2014, 23 April				
			2015.				
	a) a Statement of Cb) a Monitoring and	compliance; and Complaints Summary.			requirement appears to be completed for WCS by Springvale.		
	At the end of each re that must be complet	porting period, the EPA will provi ed and returned to the EPA.	de to the licensee a copy of the form				



Environme	nvironmental Protection Licence 3607				
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	-	Noted Refer to R1.1	Noted	
	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.				
R1.3	Where this licence is transferred from the licensee to a new licensee :	-	Noted	Noted	
	 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. 		Refer to R1.1		
	Note: An application to transfer a licence must be made in the approved form for this purpose.				
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:	-	Noted Refer to R1.1	Noted	
	 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. 				
R1.5	The Annual Return for the reporting period must be supplied to the EPA 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').	-	Noted Refer to R1.1	Noted	
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.	-	Noted Refer to R1.1	Noted	
R1.7	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:	-	Noted	Noted	
	a) the licence holder; orb) by a person approved in writing by the EPA to sign on behalf of the licence holder.				
R2	Notification of Environmental Harm	-	WCS reported that no incidents causing environmental harm occurred during the audit	Not Activated	
	Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.		harm having occurred was sighted by the Auditors.		
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	 WCS Compliance Database EPL 3607 Annual Return Centennial (2015), WCS – Annual Review 2014, 23 April 2015. 	WCS reported that no incidents causing environmental harm occurred during the audit period and none were recorded on the Incidents database. No evidence of environmental harm having occurred was sighted by the Auditors.	Not Activated	
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.	-	WCS management reported that no incidents of environmental harm occurred during the audit period therefore this condition has not been triggered during the audit period.	Not Activated	

Environme	ental Protection Licence 3607			
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation
R3.1	Written Report	-	Not Activated	Not Activated
	Where an authorised officer of the EPA suspects on reasonable grounds that:		No EPA officer has acted under this condition during the audit period.	
	 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, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on on or off premises to which the licence applies), the authorised officer may request a written report of the event. 			
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.	-	Not Activated for WCS	Not Activated
R3.3	The request may require a report which includes any or all of the following information:	-	Not Activated for WCS	Not Activated
	 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 			
	g) any other relevant matters.			
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.	-	Not Activated for WCS	Not Activated
G1.1	Copy of Licence Kept at Premises or Plant	Site observations	A copy of the licence was available at the site office.	Compliant
	A copy of this licence must be kept at the premises to which the licence applies			
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.		A copy of the licence was available at the site office.	Compliant
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Site observation	A copy of the licence was available at the site office.	Compliant
G2.1	Signage	-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed
	The location of EPA point number(s) 4 (LD4) and 5 (LD5) must be clearly marked by signs that indicate the point identification number used in this licence and be located as close as practical to the point.			

Environme	nvironmental Protection Licence 3607				
Condition No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
U1.1	Direct Toxicity Assessment	-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed	
	By 21 August 2014, while fulfilling the requirements of the planning process for the Springvale Mine Extension Project, the licensee must develop and submit to the EPA a comprehensive Direct Toxicity Assessment (DTA) program to assess the acute and chronic toxicity of the mine water being discharged from Licensed Discharge Point 9 (LDP9).				
	Concurrent with the DTA program a Chemical Analysis Program to assist in the interpretation of the DTA results must also be developed and submitted to the EPA by 21 August 2014. The Chemical Analysis Program must involve comprehensively analysing for a range of pollutants over a period of time in order for variations in both water quality, and potential acute and chronic toxicity. In addition to the pollutants already authorised by EPL 3607, Centennial must test for the following:				
	 Major cations: calcium (Ca) magnesium (Mg), potassium (K) and sodium (Na). Major anions: chloride (Cl), sulfate (SO4), total alkalinity (T. Alk.). Filtered metals: aluminium (Al), arsenic (As), cadmium (Cd), cobalt (Co), copper (Cu), iron (Fe), lead (Pb), manganese (Mn), nickel (Ni), sulphur (S) and zinc (Zn). Filtered ultra-trace nutrients: ammonia (NH3-N), nitrate and nitrite nitrogen (NOx-N), total Kjeldahl nitrogen (TKN), total nitrogen (TN), total phosphorous and dissolved organic carbon (DOC). Cyanide. 				
	The licensee must provide the DTA and Chemical Analysis programs to the EPA for review before implementation. The EPA will review the DTA and Chemical Analysis programs as part of the Response to Submissions process for the Springvale Mine Extension Project.				
E1.1	SPECIAL CONDITIONS	-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed	
	Emergency Discharges to Wolgan River				
	For the purposes of this licence, an "emergency discharge" is defined as the release of groundwater, sourced from the licensee's underground workings, through licensed discharge points 4 (LD4) and 5 (LD5) in the event of a shutdown of the Springvale Colliery to Delta Water Transfer Scheme for circumstances either beyond the licensee's control or for essential maintenance purposes.				
E1.2	Prior to discharge:	-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed	
	The licensee must ensure that appropriate measures are taken prior to any emergency water discharge to minimise erosion and sedimentation at the discharge points (LD4 and LD5) and of the drainage lines downstream of LD4 and LD5.				
E1.3	Notifying the EPA of emergency discharge	-	It was determined that this condition applies to Springvale Colliery only and not WCS.	Not Assessed	
	The licensee shall inform the EPA in writing (fax to 6332 7630):				
	 a) within 24 hours of a failure in the Springvale to Delta Water Transfer Scheme; b) no later than 48 hours prior to a scheduled pipeline shutdown; c) no later than 48 hours prior to the requirement to continue the emergency discharge for a period greater than 2 weeks; and d) within 24 hours following the reinstatement of the pipeline. 				
	The notification of a failure or planned shutdown of the pipeline must include details of the nature of the failure/shutdown and the expected timeframe to restore the pipeline.				



Environme	ntal Protection Licence 3607		
Condition No.	Condition	Evidence Source	Comment / Finding
E1.4	 Monitoring during emergency discharge In addition to the monitoring required by condition M2.1, the licensee shall undertake the following monitoring during and following an emergency discharge event: a) daily inspections of the discharge points (LD4 and LD5) and the drainage lines downstream of LD4 and LD5; b) daily monitoring (visual) of the equilibration of the flow rate between emergency discharge points LD4 and LD5; and c) a photographic survey along the length of the flow lines, beneath the discharge points, likely to be affected during periods of emergency discharge. This survey must be conducted either immediately prior to or during the emergency discharge event. 	-	It was determined that this condition applies to Springvale Collien
E1.5	 Emergency discharge reporting A report shall be prepared by the licensee, following the recommissioning of the pipeline, which shall include but not be limited to: a) the cause of the pipe failure/shutdown; b) the duration of the emergency discharge (in days); c) the total volume of water discharged from LD4 and LD5 (in kL/day); d) the results of all monitoring undertaken; e) any remedial measures required on the drainage line(s) below the emergency discharge points that have been or will require implementation; f) any measures to be taken to prevent a recurrence in the case the emergency discharge event was a result of a pipe failure; and g) all appropriate photos and figures. The report must be sent to the EPA's Bathurst office within four (4) weeks of the recommissioning of the Springvale to Delta Water Transfer Scheme. 	-	It was determined that this condition applies to Springvale Collier
E2.1	Option Study to treat Mine Water Discharge The licensee must prepare and submit to the EPA for review, a report outlining options to treat ground water (mine water) generated by the licensed premise as a result of mine dewatering activities, prior to any discharge to the environment. The objective of the option study is to reduce salt load and salinity levels discharged into the Coxs River Catchment by the licensee. The options or option identified must be capable of treating all mine water generated by the premises (ground and surface water) to achieve an electrical conductivity (EC) of 350 microsiemens per centimetre in the treated water, prior to the treated water being discharged to the Coxs River or any of its tributaries. Where appropriate, the treatment of other pollutants in the discharge must be assessed. Where the option study proposes a water treatment option that involves Delta Electricity, the option must be developed in consultation and agreement with Delta Electricity. Completion Date: The option study and report must be submitted to the EPA by 30 September 2013.	 Letter - Centennial (2013), Centennial West Water Management: EPI 3607 (Springvale/Coal Services), 26 September 2013. 	It was determined that this condition applies to Springvale Collier. The completion date for this condition was due prior to the audit p





ery only and not WCS.

Not Assessed

ry only and not WCS. period.

Not Assessed

Statement	nent of Commitments			
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation
1.1	Development Phase Appropriate erosion and sediment control measures will be implemented for construction of the upgrading of the Washery and associated infrastructure (additional conveyors and transfer points) on the Springvale Coal Services Site, refer to Figure 8 of the EIS), extension and enlargement of the existing REA, and construction of the Link Haul Road and overpass of the Castlereagh Highway and will be installed prior to commencement of disturbance activities, generally in accordance with the guidelines 'Managing Urban Stormwater – Soils and Construction, Volume 2E: Mines and Quarries' (DECC 2008).	 Site observation Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. 	 The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection. The MOP (Centennial, 2015, p. 12) notes that "<i>The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road</i>". Extension and enlargement of the existing REA has occurred and is covered under the Project Approval checklist. 	Not Activated Refer to checklist for REA works.
1.2	Works Authorisation Deed with RMS will be obtained for the overpass of the Castlereagh Highway prior to construction works within the highway easement.	 Site observation Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. 	 The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection. The MOP (Centennial, 2015, p. 12) notes that "The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road". 	Not Activated
1.3	 Prior to construction a CEMP will be prepared for the Springvale Coal Services Site that will be implemented during the construction phase and will include: Noise Management Plan; Air Quality Management Plan; Site Water Management Plan; Groundwater Management Plan; Cultural Heritage Management Plan; Weed Management Plan; and Construction Traffic Management Plan. 	 Centennial, (2015-A), Construction Noise Management Plan, February 2015. Letter – DP&E (2015-C), WCS Construction Management Plans, 17 August 2015. Letter – DP&E (2015), WCS (SSD-5579) Construction Management Plans, 17 August 2015. SLR (2015) Western Coal Services Construction Traffic Management Plan Associated with the Upgrade of the Coal Reject Emplacement Area, August 2015, Ref: 630.11117- 2. 	In a letter to DP&E dated 11 November 2015 (Centennial, 2015-B, pp.3-4) Centennial noted that "Centennial notes the Department's comments regarding the Construction Noise Management Plan and its application to the currently under construction Reject Emplacement Area. The EIS supporting the Project contemplates construction activities that would be the subject of construction noise management. Construction is not defined in the instrument of consent and neither the Noise Impact Assessment not the Department's Assessment Reports for the Project contemplates re-configuration of the Reject Emplacement Area as construction for the purposes of the Construction Noise Management Plan. The main reason for this is that the Reject Emplacement Areas are considered part of the mine's operation and an area created throughout the life of a Project, rather than for periods of intensity as contemplated by the Interim Construction Noise Guidance (2009). Notwithstanding this Centennial has submitted a Construction Noise Management Plan to the Department, which approved on 17 August 2015'. A Construction Traffic Management Plan was prepared by SLR in August 2015. The Plan was prepared in consultation with LCC (LCC, 2015) and the RMS (RMS, 2015). The Plan was approved by the Director-General on 17 August 2015 who noted that it only dealt with the traffic generated by the upgrade to the REA and that it should be reviewed and re-submitted for approval prior to commencement of construction activities associated with the link haul road or the CHPP. The CEMP included: Construction River Management Plan Construction Noise Management Plan Construction Mater Management Plan Construction River Management Plan Construction River Management Plan Construction Noise	Compliant



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Statement	atement of Commitments				
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
1.1	General Operations will be undertaken generally in accordance with the description provided in this EIS dated April 2013.	 Site observation RPS (2013), Environmental Impact Statement Western Coal Services Project, July 2103, Ref: PR110910; Final / July 2013. 	 A the time of the site inspection the following operations as listed in the EIS were in the process of being conducted: Extension and enlarging of the existing Reject Emplacement Area (REA) to enable sufficient reject disposal capacity. Studies to improve the water management systems by separating clean and dirty water streams prior to either reuse or discharge off site. Integration of remaining rehabilitation, monitoring, water management and reporting requirements associated with the closed Lamberts Gully Open Cut Mine that occupies the site. Continuation of existing approved infrastructure, facilities and activities associated with the transport and processing of coal from each mine gate and the point of delivery to the site. Infrastructure includes the existing overland conveyors, private haul roads, Kerosene Vale Stockpile Area, REAs, services, access roads, car parks and buildings. The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection. The MOP (Centennial, 2015, p. 12) notes that "The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road". 	Compliant	
2.1	Hours of Operation Operations may be undertaken 24 hours a day 7 days a week.	 Centennial (2015), WCS – Annual Review 2014, 23 April 2015. 	While the site operates 24 hours per day, construction of Stage 1 of the REA was reported by site management to be confined to the hours specified in the condition. This was not able to be verified by the auditors, however, the REA construction works are not too dissimilar to the general works at the stockpile location and further from residents.	Compliant	
3.1	Noise and Vibration Removal of the northern two thirds of the existing Co-Disposal REA at the Springvale Coal Services Site within five years of Project Approval.	Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022.	The Co-Disposal Ponds were due to be decommissioned shortly after the site inspection and WCS management reported that they would be rehabilitated in accordance with the MOP. The MOP (Centennial, 2015, p.15) notes that "The northern half of the Co–Disposal REA will be decommissioned, with rehabilitation to commence during the MOP term. This is outlined in Section 7.3 of this MOP and illustrated on MOP Plans 3A to 3H. The northern half of the Co–Disposal REA faces the Castlereagh Highway. As shown in Appendix 3, this will be completed in the first 5 years of the Project. Rehabilitation maintenance of the capped Co–Disposal REA will be undertaken later in this MOP term".	Not Activated	
3.2	The construction of the Link Haul Road in the location as depicted in Figure 1 of the EIS.	 Site observation Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. 	The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection. The MOP (Centennial, 2015, p. 12) notes that " <i>The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road</i> ".	Not Activated	



Statement	atement of Commitments			
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation
3.3	Material haulage will be managed to maintain compliance with the approved noise criteria on the private Haul Roads.	 Centennial (2015), WCS – Annual Review 2014, 23 April 2015 WCS Community Complaints Register (April 2014 / December 2015). Angus Place Deliveries Spread Sheets (XIs) – 16 April 2014 to 18 November 2014. Centennial ECS Database. 	Haul truck tyre noise on the Mount Piper haul road was responsible for noise exceedances at receivers NM1, NM2, MN3, NM4, NM5 on the following dates during the audit period: 30 July 2014, 21 September 2014, 16 October 2014, 13 November 2014 and 17 December 2014. A letter from WCS to DP&E dated 23 April 2015 noted that due to Angus Place Colliery being placed in care and maintenance, the last coal truck to use the Wallerawang and Mount Piper haul roads was on 6 March 2015. WCS management considered that until Angus Place Colliery is taken out of care and maintenance it is expected that there will be no impact to residential receivers at locations NM1, NM2, NM3, NM4 and NM5 from haulage trucks. Given the above, WCS were observed to be Non-compliant within the period July 2014 to December 2014. As there have been no haul trucks operating since 6 March 2015, WCS were compliant at the time of the site inspection.	Non-compliant (April 2014 to March 2015) Currently Compliant REC-2016-xx – Prior to the commencement of trucks using the haul roads investigate and implement measures to prevent exceedances of approved noise criteria.
3.4	Reduction of truck movements along Mt Piper Haul Road during prevailing noise enhancing weather conditions in order to meet the nominated Project Specific Noise Criteria. The default level will be zero trucking during these conditions until such time as noise monitoring confirms the truck movements required to meet the Project Specific Noise Criteria during these conditions.	 Centennial (2015), WCS – Annual Review 2014, 23 April 2015 WCS Community Complaints Register (April 2014 / December 2015). Angus Place Deliveries Spread Sheets (XIs) – 16 April 2014 to 18 November 2014. 	A letter from WCS to DP&E dated 23 April 2015 noted that due to Angus Place Colliery being placed in care and maintenance, the last coal truck to use the Wallerawang and Mount Piper haul roads was on 6 March 2015. WCS management considered that until Angus Place Colliery is taken out of care and maintenance it is expected that there will be no impact to residential receivers at locations NM1, NM2, NM3, NM4 and NM5 from haulage trucks. It is noted that Wallerawang Power Station ceased operations in March 2014. WCS management reported that the weather station was not in place until July 2015 and therefore the site was unable to verify if truck movements up to 6 March 2015 occurred during adverse meteorological conditions during the Night. A spot check of Angus Place coal deliveries to Mount Piper Power Station between 16 April 2014 and 18 November 2014 identified some deliveries occurred at 12:23am (20/06/2014) and 11:53pm (29/05/2014). No activities, such as stockpiling of ROM coal were observed at Kerosene Vale during the site inspection. Given meteorological information concerning the operation of trucks during adverse meteorological conditions during the Night up to 6 March 2015 was not available, this condition could not be verified.	Compliant (at time of audit) Not Verified between 4 April 2014 and 6 March 2015
3.5	Within 6 months of the date of the Project Approval, A Noise Management Plan will be prepared for the entire PAA. The plan will be prepared in consultation with the EPA. The Noise Management Plan will include the existing monitoring and mitigation strategies contained in the current approved Angus Place Noise Monitoring program, specifically, quarterly inspections of road surfaces, quarterly attended and unattended monitoring to assess compliance and additional noise monitoring in response to noise complaints. The Noise Management Plan will include a protocol for determining the prevailing noise enhancing weather conditions which would trigger reduced transport on the Mt Piper Haul Road.	-	Refer to Condition 9, Schedule 3 of SSD-5579, Appendix A for Preparation of the Plan.	Compliant Refer to REC-2016-xx
3.6	 The following dust mitigation measures will be implemented and will be completed prior to operating the new infrastructure: Enclosure of the existing and proposed Washery; Enclosure of conveyor transfer points; Loading of coal rejects from an enclosed bin; Majority of coal reclaimed from stockpiles via underground reclaim tunnel; Three quarter enclosed conveyors; and New Link Haul Road will be fully sealed. 	 Site observation Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. 	The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection. The MOP (Centennial, 2015, p. 12) notes that " <i>The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road</i> ".	Not Activated

Statement	of Commitments			
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n No.	Condition	Evidence Source	Comment / Finding	Recommendation
3.7	Location of infrastructure as per Figure 8 of the EIS.	 RPS (2013), Environmental Impact Statement Western Coal Services Project, July 2103, Ref: PR110910; Final / July 2013. 	The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection.	Not Activated
4.1	 Air Quality The following dust mitigation measures will be implemented and will be completed prior to operating the new infrastructure: a) Enclosure of the existing and proposed Washery; b) Enclosure of conveyor transfer points; c) Loading of coal rejects from an enclosed bin; d) Majority of coal reclaimed from stockpiles via underground <i>reclaim tunnel</i>. e) Three quarter enclosed conveyors; f) Stockpile water sprays which are wind activated; g) New Link Haul Road will be fully sealed; h) Regular use of water carts on unsealed roads trafficked by heavy vehicles. This will include the surface of the proposed REA; and i) Installation of a TEOM continuous atmospheric dust monitoring unit within the Blackmans Flat residential area. 	 Site observation Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. Dust Risk Report 00:00 01/01/2016 - 12:00 03/01/2016. Dust Risk Report 00:00 13/01/2016 - 12:00 15/01/2016. 	 The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection. The MOP (Centennial, 2015, p. 12) notes that "The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road". a) Not constructed at the time of the site inspection. b) Not constructed at the time of the site inspection. c) Not constructed at the time of the site inspection. d) Not constructed at the time of the site inspection. e) The auditors observed three quarter enclosed conveyors during the site inspection. f) Control Room operators reported that stockpile sprays were wind activated. g) Not constructed at the time of the site inspection. h) WCS management reported that water carts are despatched based upon daily weather forecasting predictions that are conducted using Dust Risk Reports. i) The Tapered Element Oscillating Microbalance (TEOM) located in the vicinity of Blackmans Flat was observed by the auditors. 	Compliant
4.2	Within 6 months of the date of the Project Approval, an updated Air Quality Management Plan will be prepared for the entire PAA. The plan will be prepared in consultation with the EPA.	-	Refer to Condition 17, Schedule 3 of SSD-5579, Appendix A.	Compliant
5.1	Surface Water, Groundwater, Geomorphology and Aquatic	-	Refer to Condition 23, Schedule 3 of SSD-5579, Appendix A.	Compliant (pending approva
	Within 6 months of Project Approval a single Water Management Plan will be prepared for the entire PAA and will include operation of the new infrastructure, water recycling system, surface and groundwater monitoring including Wangcol Creek mixing zone and a staged implementation of the separation of the Lamberts Gully drainage line as it passes through the Springvale Coal Services Site as well as the localised changes associated with approved Mt Piper Power Station Ash Emplacement Project.			nom the Director-General)
5.2	Within 6 months of the date of the Project Approval apply for any necessary water licenses covering the Springvale Coal Services Site.	-	The WCS site does not abstract groundwater or utilise harvestable water rights for water supply and hence does not hold water licences. WCS site water demand is met via the collection of dirty water run-off and reuse for processing purposes and maximising water recycling facilities within the CHPP.	Not Activated
			Water management ponds / dams at the site are exempt from harvestable right calculations for dam sizes as they are used "for the capture, containment and recirculation of drainage" and are required for the prevention of contamination of nearby water sources (<i>Water Management (General) Regulation 2011</i> , Schedule 1 Excluded Works (3)). As such, no water extraction licences are held for the WCS site.	

Statement	of Commitments			
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation
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.	 Site observations. GHD (2016), Lambert Gully REA Operation and Maintenance Manual for REA and A Pit Maintenance Upgrade, February 2016, 21/24377. RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Site observations. 	A diversion drain was observed around the new REA and was reported to have been designed such that 1 in a 100 year ARI flood event could be conveyed from the external catchments around the REA into a site drainage line. The drainage line diverts water into drainage lines to the east and west of the site preventing water from offsite draining into the REA (MOP, p.25). Observations from the site inspection indicated that there were places where clean and dirty water mixed, for example from the catchment upstream of the Sediment Dam. WCS management reported at the time of the site inspection that a revised Site Water Management Plan was in the process of being prepared by GHD and the revised plan would consider if diverting clean water that is now directed to LDP-006 would be reasonable and feasible. Given a revised Water Management Plan was in the process of being developed at the time of the site inspection and many of the features required were dependent upon the findings of the revised Water Management Plan, such as diversion of clean water, this condition was considered not activated.	Not Activated Refer to REC-2016-xx (Condition 23, Schedule 3, SSD-5579, Appendix A)
5.4	Construct a staged bypass of the Conveyor Dam and Retention Pond on the Springvale Coal Services Site within 3 years of the date of the consent.	Site observations.	The staged bypass of the Conveyor Dam and Retention Pond had not been constructed at the time of the site inspection.	Not Activated
5.5	Construct a pollution control pond control runoff from the new REA. This structure will have a capacity of approximately 15 ML and will be located on the north-eastern corner of the REA. The dam will have a pipe connection to the existing Washery Dam, which is connected to Cooks Dam via a pipeline. This will enable treated stormwater from the new REA to be recycled back to the Washery via Cooks Dam. This dam is to be constructed once the current A Pit REA is completed but prior to the base of the new REA being completed.	 Site observations. GHD (2016), Lambert Gully REA Operation and Maintenance Manual for REA and A Pit Maintenance Upgrade, February 2016, 21/24377. RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Site observations. 	A' Pit was ready to receive decant water from the new REA when at the time of the site inspection. 'A' Pit had been enlarged to act as a sediment holding pond to the new REA and will form the holding pond for supernatant and storm water. Decant pumps are installed at the north east corner of 'A' Pit to pump water to Cooks Dam and will discharge flood waters up to the 1:100 ARI storm within a maximum 14 days. An Operations and Maintenance Manual (GHD, 2016) provided details concerning construction and operation of the new REA as well as "A' Pit. GHD (2016, p.11) discusses the upgrades to 'A' Pit, including, but not limited to bund crest levels, construction material and internal and external slopes.	Compliant
5.6	Provision of a belt press filter system (or equivalent) to recover water from the tailings produced from the new Washery. This water recovery system will cover tailings produced from the existing Washery but will be installed as part of the construction of the new Washery.	 Site observation Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. 	The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection. The MOP (Centennial, 2015, p. 12) notes that " <i>The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road</i> ".	Not Activated
5.7	Apply for a separate EPL covering the entire PAA that includes LDP 003 (Kerosene Vale Stockpile Area) and LDP 006 and LDP 007 (conveyor at Duncan Street, Lidsdale).	 Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. RPS (2013), Environmental Impact Statement Western Coal Services Project, July 2103, Ref: PR110910; Final / July 2013. 	 A separate EPL covering the entire site that includes LDP-003 (Kerosene Vale Stockpile Area) and LDP-006 and LDP-007 (conveyor at Duncan Street, Lidsdale) had not been applied for at the time of the site inspection. During the consultation process (Main Report, Chapter 3) the EPA noted that a standalone EPL would be beneficial for WCS. It is noted that an EIS (RPS, 2013, p.135) mitigation measure for surface water management and mitigation is that SCSS will "Apply for a separate EPL covering the entire PAA that includes LDP 003 (Kerosene Vale Stockpile Area) and LDP 006 and LDP 007 (conveyor at Duncan Street, Lidsdale). The 2015 / 2022 MOP (Centennial, 2015, p.6) also states that "Western Coal Services will liaise with the EPA during the MOP period about obtaining an EPL which solely covers Western Coal Services". 	Non-compliant Refer to REC-2016-xx (Main Report, Section 6.1.1)
5.8	Within 3 months of completion of the clean and dirty water separation system consent apply to relocate the current LDP006 to the spillway of Cooks Dam and replace the existing LDP006 with a license monitoring point.	Site observations	Refer to Condition 5.3	Not Activated

Statement	atement of Commitments			
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation
5.9	Within 6 months of completion of the Link Haul Road, complete the additional riparian planting for a 100 m section of Wangcol Creek downstream of the Link Haul Road crossing. The species selection and density is to be determined in consultation with the SCA and NOW.	Site observations	It was unclear to both WCS management and MCW Environmental if this condition applied whether the link haul road bridge was or was not constructed. The Link haul road bridge crossing of the creek had not been constructed at the time of the site inspection and WCS management was not clear if the haul road (and bridge) would be constructed. It was unclear if this condition applied whether the bridge is built or not.	Not Activated Refer to REC-2016-xx (Condition 27, Schedule 3, SSD-5579, Appendix A)
5.10	Within 12 months of Project Approval, site specific trigger values based on ANZECC 2000 Guidelines will be developed for Wangcol Creek.	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. 	A Water Management Plan (RPS, 2014) was prepared in August 2014. The Water Management Plan has yet to be approved by the Director-General. WCS management reported that they were in the process of reviewing and updating the Water Management Plan as it was prepared on the assumption that a second washery would be constructed. WCS management reported that a second washery was unlikely to be constructed and therefore the plan and water balance needed to be updated to better reflect the site's operations and layout.	Compliant Refer to REC-2016-xx (Condition 20, Schedule 3, SSD-5579).
			The Water Management Plan provides Site Specific Trigger Values (SSTV's) for Hardness (mg/L), Iron (dissolved, mg/L), Manganese (dissolved, mg/L), Nickel (dissolved, mg/L) and Zinc (mg/L). RPS (2014, p.58) noted that " <i>It is not considered beneficial to assign trigger values to any other surface water monitoring taking place onsite as this water is being contained within the on-site surface water storage facilities and can be discharged via LDP006</i> ".	
			However, the Water Management Plan also notes that "GHD (2014) have undertaken a study to derive suitable SSTVs for a range or parameters to be applied to the water quality of Wangcol Creek Far Downstream. Corresponding discharge limits have also been proposed for the same parameters at LDP006 with a view to maintain the water quality at Wangcol Creek Far Downstream to within the SSTVs. At the time of writing, the SSTV assessment was under review by the EPA and as such, the proposed SSTVs are not currently in use at the WCS site" (RPS, 2014, p.57).	
			This condition is considered compliant given SSTV's have been developed and included in the Water Management Plan; however, there was no evidence of formal acceptance of the SSTV's by the EPA. Acceptance of the SSTVs should be sought form the relevant agencies and the WMP amended as required.	



Statement	atement of Commitments			
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation
5.11	 To better understand the groundwater linkages, within 12 months of Project Approval, a baseline groundwater monitoring program will be established for the Springvale Coal Services Site. The baseline groundwater monitoring program will include: Quarterly monitoring of water levels from a network of monitoring bores following the completion of construction; Six monthly sampling of monitoring bores for field analysis of pH, EC and temperature and laboratory analysis on major ions, pH, EC, TDS, dissolved arsenic, cadmium, chromium, copper, iron, lead, manganese, nickel and zinc; 	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. 2015 Groundwater Results.XIs 	A Water Management Plan (RPS, 2014) was prepared in August 2014. The Water Management Plan has yet to be approved by the Director-General. WCS management reported that they were in the process of reviewing and updating the Water Management Plan as it was prepared on the assumption that a second washery would be constructed. WCS management reported that a second washery was unlikely to be constructed and therefore the plan and water balance needed to be updated to better reflect the site's operations and layout. Given the revised Water Management Plan was in the process of being developed at the time of the site inspection this condition was considered not verified.	Not Verified
	 An annual review so that its capacity as an accurate predictive tool can be assessed and maintained. 		Section 5 of the Water Management Plan included an assessment of groundwater impacts at the site. Section 8.2 of the Water Management Plan included a groundwater monitoring program. The plan notes that " <i>The current groundwater monitoring network on WCS site comprises 15 monitoring bores (Table 8.2). The bores monitor the groundwater level and quality within the; saturated overburden, Lithgow Seam, and underlying Marrangaroo Formation. In August 2013 the groundwater monitoring network was expanded with the installation of four standpipe piezometers (BH07, BH08, BH09 and BH10). As part of this program, a routine groundwater monitoring program was recommended which included; monthly monitoring of water levels and basic water chemistry (pH and EC), and six monthly sampling for comprehensive water quality analysis</i> " (RPS, 2014, p.44). Groundwater monitoring bores BH03 and BH06 were observed during the site inspection.	
			The plan also notes that "Groundwater has been monitored at the WCS site since October 2010, however, a routine monitoring program is yet to be implemented" (RPS, 2014, p.53). An Excel spread sheet of groundwater results from 22 May 2015 through to 11 November	
			2015 was available for review. The spread sheet included results for pH, EC, TDS, dissolved arsenic, cadmium, chromium, copper, iron, lead, manganese, nickel and zinc. Given an annual review of groundwater results was not available for review this condition was considered not verified.	
6.1	Visual	Site observation	The link haul roads, link haul road overbridge, washery and associated infrastructure	Not Activated
	Prior to its completion, the battered slopes of the Link Haul Road overpass bridge will be planted with low maintenance bardy groundcover flowering species	 Centennial (2015), Mining Operations Plan Western Coal 	(additional conveyors and transfer points) had not been constructed at the time of the site inspection.	
	will be planted with low maintenance hardy groundcover howening species.	Services November 2015 to October 2022.	The MOP (Centennial, 2015, p. 12) notes that "The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road'.	

inspection.

Statement	of Commitments			
Conditio n No.	Condition	Evidence Source	Comment / Finding	
6.2	Staged rehabilitation of the REA will be in accordance with the timeframes provided within the EIS	Site observations. DDC (2012) Environmental	Photographic evidence of progressive rehabil	itation at the REA is shown below:
	within the EIS.	 RPS (2013), Environmental Impact Statement Western Coal Services Project, July 2103, Ref: PR110910; Final / July 2013. 		
			Contour Bank	Contour Bank and Sediment Dam Wall
			'A' Pit pump pit rehabiliation	Rehabilitation of the clean water diversion around new REA
			The EIS, Figures 12 to 16 notes that rehabilita areas of progressive rehabilitation were obser (and 'A' Pit) this condition was found to be con	ation will occur over a 5 to 25 year period. Giv rved during the site inspection around the REA mpliant.
7.1	Aboriginal Heritage Management Within six months of Project Approval, a CHMP will be prepared as part of the ongoing management of the Springvale Coal Services Site. The CHMP which will be developed in consultation with the Aboriginal Stakeholders.	 RPS (2014), Centennial's Western Holdings Aboriginal Cultural heritage Management Plan, 2014, Ref: PR121000; Final September 2014. Letter – DP&E (2014), Western Region Aboriginal Cultural Heritage Management Plan, 23 October 2014. 	The Centennial Aboriginal Cultural Heritage M prepared to provide Centennial with a consist Aboriginal communities about Aboriginal cultu consistent minimum standards and processes monitoring and management across Centenni the following regional Centennial sites: Airly M Lidsdale Siding; Springvale Mine and WCS. consultation, handling sensitive cultural inform control and dispute resolution. The ACHMP was approved by the Director-G	Management Plan (ACHMP) (RPS, 2014) was ent approach to consultation with the local ural heritage identification as well as to identify s for Aboriginal cultural heritage identification, ial's western operations. The ACHMP include Aine; Angus Place Colliery; Clarence Colliery; The ACHMP outlines protocols for Aboriginal nation, roles and responsibilities, document eneral on 23 October 2014.
			WCS management reported that no Aborigina One Aboriginal site located behind 'A' Pit was	al sites were impacted during the audit period. s observed to be fenced during the site

MCW Environmental





ear period. Given around the REA

PS, 2014) was ith the local I as to identify identification, ACHMP includes rence Colliery; for Aboriginal , document

Compliant

Statement of Commitments						
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation		
8.1	Traffic Management The Link Haul Road will be constructed in accordance with AUSROADS Guidelines in consultation with RMS.	 Site observation Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. 	 The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection. The MOP (Centennial, 2015, p. 12) notes that "The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road". 	Not Activated		
8.2	All construction sites associated with the infrastructure upgrade prepare and implement a Construction Traffic Management Plan.	 Site observation Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. SLR (2015) Western Coal Services Construction Traffic Management Plan Associated with the Upgrade of the Coal Reject Emplacement Area, August 2015, Ref: 630.11117- 2. Letter – RMS (2015), SSD- 5579: WCS Construction Traffic Management Plan, 13 August 2015. Letter – LCC (2015), WCS Construction Traffic Management Plan, 13 August 2015. 	 The link haul roads, link haul road overbridge, washery and associated infrastructure (additional conveyors and transfer points) had not been constructed at the time of the site inspection. The MOP (Centennial, 2015, p. 12) notes that "<i>The Development Consent approved some activities which are not proposed during the MOP term, including large upgrades to the Coal Handling Preparation Plant (CHPP) and construction of the link haul road to the existing Angus Place to Mount Piper Power Station Haul Road</i>". A Construction Traffic Management Plan was prepared by SLR in August 2015. The Plan was prepared in consultation with LCC (LCC, 2015) and the RMS (RMS, 2015). The Plan was approved by the Director-General on 17 August 2015. It is noted that construction of the washery and link haul roads had not been completed at the time of the site inspection. Construction traffic associated with the Stage 1 REA generally consisted of excavators and bulldozers, that stayed on-site for the duration of the Stage 1 works. 	Not Activated		
8.3	Upgrade Springvale Coal Services intersection line-marking to RMS standards.	 Site observations Central West Line Marking Quotation, 7 August 2014. Barnson Pty Ltd Invoice, 30 November 2014. 	Line markings were observed at the intersection of the Castlereagh Highway and the WCS Access Road during the site inspection. Evidence this was completed to the satisfaction of the RMS was not available for review; however, this condition is considered compliant given the requirement was achieved within six months of approval.	Compliant		
9.1	Contamination A Phase 2 Assessment of the entire Springvale Coal Services Site will be conducted before February 2015, in accordance with Springvale Coal's stated commitments to the NSW EPA (letter dated 2 February 2012).	 AECOM (2014), Targeted Phase 2 Environmental Site Assessment, 22 October 2014, Ref: 60326953. Email – Centennial (2015), Phase 2 Environmental Site Assessment at Western Coal Services [Sent: 02/06/2015 @ 3:58pm] to EPA. 	Refer to Condition 21, Schedule 3 of SSD-5579, Appendix A.	Compliant		

Statement of Commitments						
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation		
10.1	Rehabilitation Within six months of Project Approval a single Rehabilitation Plan will be prepared for the entire PAA in consultation with DRE and DPI and will include the timeframes provided within this EIS, details of the rehabilitation methods, monitoring and reporting framework. Results arising from the implementation of the program will be reported each year in the Annual Review (currently referred to as the AEMR).	 SLR (2014), Rehabilitation and Closure Plan, September 2014. Letter – DRE (2014), WCS Rehabilitation and Closure Plan, September 2014, 14 October 2014. Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. Centennial (2015-A), WCS – Annual Review 2014, 23 April 2015. Letter – Centennial (2015-B), WCS - Annual Review, 23 April 2015. Letter – Centennial (2015-C), WCS Annual Environmental Management Report, 27 February 2015. Letter – DP&E (2015), WCS – Annual Review 2014, 20 March 2015. 	 A Rehabilitation and Closure Management (SLR, 2014) had been prepared. A letter from DRE to WCS dated 14 October 2014 noted that WCS had submitted revised plan on 25 September 2014 following an initial submission in July 2014. DRE approved the plan on 14 October 2014 noting that "the R&CP is considered to be satisfactory taking into account the relatively short term approval period which is covered". DRE also noted that the "Rehabilitation and Closure Management Plan is an addendum to the Springvale Colliery Mining Operations Plan (MOP) which was initially approved by DRE on 24 May 2010 and which expires in 20 November 2016". DRE required that a new MOP for WCS be prepared and submitted to DRE no later than 30 September 2016. Rehabilitation was addressed in Section 5 of the Annual Review. The Annual Review was submitted to DP&E on 27 February 2015 (Centennial, 2015-C. DP&E responded to WCS on 20 March 2015 requesting further information from the site concerning: Condition 17, Schedule 3 – Prepare and Implement a revised Air Quality Management Plan. Condition 4, Schedule 2 - Resubmit compliance performance information for Table 3.18 of the Annual Review. Condition 8, Schedule 3 – Implement best practice to minimise construction, operational and road noise. Provide detailed plan of noise mitigation measures. Condition 3, Schedule 4 - Demonstrate compliance with notifying potential landowners. 	Compliant		
).2	The rehabilitation program will include previous commitments from the Lamberts Gully Project Approval (06-0017) including Eucalyptus cannonii.	 SLR (2014), Rehabilitation and Closure Plan, September 2014. Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. RPS (2014), Regional Biodiversity Strategy Neubeck Project, Springvale Mine Extension Project and Angus Place Colliery Extension Project, 14 March 2014, Ref: PR121085; Final / March 2014. 	 The 2015 / 2022 MOP (Centennial, 2015, p.27) notes that "Eucalyptus cannonii is used in the planting mix for rehabilitation, following the decommissioning". The MOP notes that the offsets package outlined within the Regional Biodiversity Strategy Western Projects (RPS, 2014) has been divided into three forms: Offsets land to be secured in perpetuity with an Offsets Management Plan: Airly Offset Site; and Wolgan Road Northern Offset Site. Rehabilitation land in accordance with a defined Rehabilitation Plan: Wangcol Creek Rehabilitation; Lamberts Gully Rehabilitation; Commonwealth Colliery Rehabilitation Site. Land management to be rehabilitated and restored as per a Land Management Plan: Wolgan Road Southern Management Site; Brays Lane, Lidsdale Management Site; Coxs River, Angus Place Management Site. The MOP (p.42) also notes the following concerning the Former Lamberts Gully Rehabilitation (Domain 5): Stable landform that is non-polluting. Drainage structures will be designed and constructed where required in accordance with Blue Book requirements. Class V Land and Soil Capability – Nature Conservation. Ecosystem health. Ecosystem structure. 	Compliant		

Consolidated Coal Lease 733								
Conditio n No.	Condition	Evic	dence Source	Comment / Finding				
CCL-733- 01	Notice to Landholders Within a period of three months from the date of grant/renewal of this lease or within such further time as the Minister may allow, the lease holder must serve on each landholder of the land a notice in writing that this leas has been granted/renewed and whether the lease includes the surface. An adequate plan and description of	•	 Letter – Centennial (2014-A), Notification to Landholder of Renewal of ML 204, 30 May 2014. Letter – Centennial (2014-B), Natification to Londholder of 	Letter – Centennial (2014-A), Notification to Landholder of Renewal of ML 204, 30 May 2014. Letter – Centennial (2014-B), Notification to L andholders from Centennial to landholders including, Crown Lands Division, RMS, Energy Australia, Forests NSW, local resident(s), Transport for NSW informing of the rene lease were available for review for leases ML 1352 and ML 314 that were renewed audit period. WCS was found to be compliant with this condition as evidence of no landholders was provided and the intent to notify landholders was evident.				MS, Energy the renewal of the renewed during the nce of notification to
	the lease area must accompany the notice.	Renewal of ML 1319, 5 June	Lease	Date Granted	Renewal Date	Expiry Date		
	If there are ten or more landholder affected, the lease older may serve the holice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this lease has been granted/renewed; state whether the lease includes the surface and must contain an adequate plan and description of the lease area.	•	 Letter – Centennial (2014-C), Notification to Landholder of Renewal of ML 314, 23 September 2014. Letter – Centennial (2014-D), Notification to Landholder of Renewal of ML 1352, 1 December 2014. 	Consolidated Coal Lease 733	23 May 1990	23 December 2008	3 July 2027	
		Ren Sept • Lette Notif Ren Dece		Mining Lease 1352	26 May 1994	2 March 2015	22 June 2036	
				Mining Lease 1448	31 May 1999	-	31 May 2020	
				Mining Lease 314	3 August 1993	16 June 2014	3 August 2035	
						•		
CCL-733-	Environmental Harm	٠	WCS Compliance Database	WCS management reported the	at there have not bee	en any incidents that h	ave:	
02	The proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the development.	•	 EPL 3607 Annual Return Centennial (2015), WCS – Annual Review 2014, 23 April 2015. 	c) Caused or threatened to c beings or to ecosystems the d) Breached or exceeded the	ause actual or poten at is not trivial harm limits or performanc	tial harm to the health to the environment; ar e measures/criteria in	or safety of human nd/or this consent.	
				Therefore no incident report ha agencies.	s been provided to th	ne Director-General an	nd any other relevant	
				The auditors sighted screensho of Centennial Coal defined Lev Report for further details).	ets of the ECD Lotus el 1-5 incidents for th	Notes database that p ne audit period (Refer t	provided a summary to Section 5.2 of the	

Compliance Status & Recommendation

Compliant

Compliant

Consolidated Coal Lease 733							
Conditio n No.	Condition	Evidence Source	Comment / Finding				
CCL-733- 03	 Mining Operations Plan a) Mining operations must not be carried out otherwise than in accordance with: a Mining Operations Plan (MOP) which has been approved by the Director-General of the Department of Primary Industries. b) The MOP must: i. identify areas that will be disturbed by mining operations; ii. identify how the mine will be managed to allow mine closure; iv. identify how mining operations will be carried out on site in order to prevent and or minimise harm to the environment; v. reflect the conditions of approval under: the Environmental Planning and Assessment Act 1979 the Protection of the Environment Operations Act 1997 and any other approvals relevant to the development including the conditions of this lease; and vi. have regard to any relevant guidelines adopted by the Director-General. c) The titleholder may apply to the Director-General to amend an approved MOP at any time. d) It is not a breach of this condition if: i. the operations constituting the breach were necessary to comply with a lawful order or direction given under the Mining Act 1929, the Environmental Planning and Assessment Act 1979 or the Occupational Health and Safety Act 2000; and ii. the Director-General had been notified in writing of the terms of the order or direction prior to the operations constituting the breach were necessary to the Occupational Health and Safety Act 2000; and e) A MOP ceases to have affect 7 years after date of approval or other such period as identified by the Director-General. 	 Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. Letter – DRE (2015), Approval of Mining Oeprations Plan – Western Coal Services, 23 December 2015. SLR (2014), Rehabilitation and Closure Plan, September 2014. Letter – DRE (2014), WCS Rehabilitation and Closure Plan – September 2014, 14 October 2014. 	 a) WCS management noted that the new WCS 2015 / 2022 MOP (Cente supersedes the Rehabilitation and Closure Management Plan (SLR, 2 principal document for rehabilitation at the site. The 2015 / 2022 MOP DRE on 21 December 2015 and was approved by the Department on 2015. It is noted that the MOP is very recent and there was not a lot o deviations to have occurred. b) i. identified areas that will be disturbed by mining operations (S 2.2); ii. WCS does not undertake mining operations. WCS is a Runhandling and processing plant and a reject and tailings emple comprising a coal distribution network. The MOP describes '1 proposed activities for these areas; iii. Section 3 addresses areas that will require management prio closure of the site; iv. Section 3 identifies how mining operations will be carried out prevent and or minimise harm to the environment; v. The MOP reflected the conditions of approval including SSD-throughout Section 3, Table 10 and included as Appendix A a leases (Table 10); c) Noted. The MOP was not amended during the audit period and replac MOP (April 2008 to April 2015) that expired in 31 March 2015. d) Noted e) Noted The MOP was prepared in accordance with the Department of Industry – I Resources and Energy (DRE) publication titled ESG3: Mining Operations F Guidelines (September 2013). DRE wrote to Centennial on 14 September 2014 concerning the Rehabilitat WCS. Key points of the DRE letter are provided below: a. The Rehabilitation Closure Plan, WCS was accepted as an addendum Colliery Mining Operations Plan, WCS was to be prepared and submitted to DRE no 14 September 2016. b. A new MOP for WCS was to be prepared and submitted to DRE no lat September 2016. b. A new MOP for WCS may be provided earlier than 30 September 21 with the preparation of an updated Springvale Colliery MOP. d. A new MOP for WCS addresses Points B and C of DRE no lat Septe				

Compliant

ennial, 2015) 2014) as the was submitted to 23 December of time for

Sections 2.1 and

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Consolidat	Consolidated Coal Lease 733					
Conditio n No.	Condition	Evidence Source	Comment / Finding			
CCL-733- 04	Environment Management Reporting The lease holder must lodge Environmental Management Reports (EMR) with the Director-General annually or at dates otherwise directed by the Director- General.	 Centennial (2015-A), WCS – Annual Review 2014, 23 April 2015. Letter – Centennial (2015-B), WCS - Annual Review, 23 April 2015. Letter – Centennial (2015-C), WCS Annual Environmental Management Report, 27 February 2015. Letter – DP&E (2015), WCS – Annual Review 2014, 20 March 2015. 	 The Annual Review (for 2014) was submitted to DP&E on 27 February 20 2015-C. DP&E responded to WCS on 20 March 2015 requesting further in site concerning: Condition 17, Schedule 3 – Prepare and Implement a revised Air Quar Plan. Condition 8, Schedule 2 - Resubmit compliance performance information of the Annual Review. Condition 8, Schedule 4 - Demonstrate compliance with notifying point and road noise. Provide detailed plan of noise mitigation measures. Condition 3, Schedule 4 - Demonstrate compliance with notifying point and road noise. Provide detailed plan of noise mitigation measures. Condition 3, Schedule 4 - Demonstrate compliance with notifying point and provide detailed plan of noise mitigation measures. Condition 3, Schedule 4 - Demonstrate compliance with notifying point directional noise monitoring and engagement with landowners if attenuation required at properties citing the installation of double glazing at residential. The following is noted concerning the 2014 Annual Review: g) The 2014 Annual Review included monitoring results for the calendar a comparison against statutory requirements were provided in Section in Non-compliances were addressed in Section 3.2.2 of the Annual Review details concerning the actions that were (or are being taken) to ensure () Section 3 included trends in the monitoring data for the review period. k) No discrepancies were noted in the 2014 Annual Review for the report) Measures that will be implemented in the next reporting period were in of the Annual Review. These included, but were not limited to: <i>"Continuation of the upgrade to the water management system;"</i> <i>Continuation of the upgrade to the water management system;</i> <i>Rehabilitation monitoring will continue in 2015 utilising the EFA n methodology;</i> <i>Rehabilitation monitoring will continue in 2015 utilising the EFA n methodology;</i> <i>Rehabilitation monitoring will continue in 20</i>			
CCL-733- 05	The EMR must:a)report against compliance with the MOP;b)report on progress in respect of rehabilitation completion criteria;c)report on the extent of compliance with regulatory requirements; andd)have regard to any relevant guidelines adopted by the Director-General;	 Letter – DRE (2015), WCS – 2014 AEMR, 28 October 2015. 	Refer to CCL-733-04. DRE noted in a letter to Centennial (DRE, 2015) that the AEMR adequatel requirements of Condition 3 of ML 1448, ML 1242, ML 564 and PLL 133, 0 204, ML 1319, ML1352 and CL 394 and Condition 4 and 5 of CCL 733 and			

Compliant

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Consolidat	Consolidated Coal Lease 733						
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation			
CCL-733- 06	Additional environmental reports may be required on specific surface disturbing operations or environmental incidents from time to time as directed in writing by the Director-General and must be lodged as instructed.	 Letter – Centennial (2015-A), WCS (SSD-5579) and Lidsdale Siding (PA-08_0223) Noise, 11 November 2015. 	 WCS management reported that they had not been instructed to provide any additional reports to the Director-General. It is noted that Centennial wrote to the DP&E on 11 November 2015 (Centennial, 2015-A) and provided an update concerning the noise management at the WCS site. The letter noted that Centennial: Had engaged a Group Stakeholder Engagement manager in July 2015. Will update the Noise Impact Assessment for WCS and that an application to modify the WCS DC will be submitted during 2016. A study supporting the identification of on-site mitigation measures was scheduled to be commissioned by 30 December 2014. The construction of the Reject Emplacement Area (REA) was not included in SSD-5579 or the Noise Impact Assessment as a construction activity; however, it appeared from the letter that the DP&E considered re-configuration of the REA as construction for the purposes of the Construction Noise Management Plan. Centennial put forward that the REAs are considered part of the site's operation and an area created throughout the life of a site rather than short stand-alone projects. Notwithstanding their view, Centennial noted they had submitted a Construction Noise Management Plan to DP&E that was approved on 17 August 2015. Centennial acknowledged that DP&E had requested monthly noise compliance reporting but noted that it was in the process of developing a regional noise monitoring program as it intends to rationalise its monitoring program across the Lidsdale/Wallerawang region. The regional plan would address noise and management requirements for the WCS site. The letter indicated that the regional plan is due for submission by 21 February 2016. SSCS was not aware of the current status of the regional plan as this was being prepared by Centennial corporate. 	Not Activated			

Consolidat	onsolidated Coal Lease 733					
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation		
CCL-733- 07	Rehabilitation Disturbed land must be rehabilitated to a sustainable/agreed end land use to the satisfaction of the Director-General.	 Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. RPS Australia (2015), Tree Clearance Supervision For Tailings Dam Expansion, Western Coal Services, 12 October 2015, Ref; 127341:DW:AB. NewEra (2015-A) Follow Up Report Coal Services Revegetation Works, 15 November 2015. NewEra (2015-B) Follow Up Report Coal Services Revegetation Works, 15 November 2015. AECOM (2015), Springvale Coal Services Annual Rehabilitation Monitoring 2015, 4 November 2015, Ref: 60442266. AECOM (2014), Rehabilitation Monitoring - Selected Centennial Mine Sites, Lithgow, 2014, 11 June 2014, Ref: 60317682. 	 WCS management reported that the rehabilitation initiatives had just started at the time of the site inspection. For the purposes of managing rehabilitation, and closure requirements WCS has been divided into 'Domains'. Primary domains at WCS are land management units within the site with unique operational and functional purpose and similar geophysical characteristics. Primary domains outline the current land use at the site. Secondary domains are land management units characterised by a similar post mining land use objective (final land use). The MOP (Centennial, 2015) identifies the following Primary Domains: Domain 1 – Washery and Coal Handling: this area includes the existing and proposed coal processing area, coal stockpiles, associated conveyors, access roads and storm water dams. Domain 2 – REA: this area incorporates both the existing approved REA and the proposed expanded REA. Domain 5 – Previous rehabilitation work and offsets associated with the Lamberts Gully Open Cut Mine. Domain 6 – Kerosene Vale Site (Coal stockpile area, rehabilitation area, water management, stockpile stowage material and sealed underground entries). Domain 7 – Haul roads (Centennial owned) and conveyors. Domain 8 - Energy Australia. Domain 9 - Lithgow City Council Waste Emplacement. Management of this area is the responsibility of Energy Australia. Domain 9 - Lithgow City Council. The MOP (Centennial, 2015) identifies the following Secondary Domains: Rehabilitation – Woodland to be seeded with a woodland mix including the REA, CoDisposal REA, existing rehabilitation area, pit top and Kerosene Vale. Rehabilitation – Pasture rehabilitation will be used in rehabilitating haul road batters and any disturbed areas in the conveyor corridor. Ash Emplacement from nearby power stations - There are areas of the site owned by Energy Australia which will be used for future ash emplacement. These areas are	Compliant Refer to REC-2016-35 and REC-2016-36 (Condition 44, Schedule 3, SSD-5579)		

Consolida	Consolidated Coal Lease 733						
Conditio n No.	Condition	Evidence Source	Comment / Finding				
CCL-733-	Continued:	Continued:	Continued:				
07			Progressive rehabilitation was observed at a number of locations around the with 'A' Pit and the new REA.				
			The Co-Disposal Reject Emplacement Area (Domain 3) was due to stop red within a few weeks of the site inspection after which time WCS management rehabilitation works to cap and contour part of the area would commence.				
			Final landforms had not been established for the majority of the site at the ti inspection with the exception of some areas of rehabilitation conducted ove the south-east of the site. These landforms were reported by WCS manage the Lamberts Gully catchment.				
			Evidence of temporary grass cover to minimise the total area exposed for d for soil stabilisation was observed during the site inspection. These largely drainage lines and swales in and around the REA. The new REA cannot be completed (i.e. final batters) until the three Stages have been completed, es approximately four to five years time. It is noted that Area A including the R construction (Stage 2) at the time of the site inspection and therefore progre rehabilitation was ongoing (as noted above) but limited. However whilst con ongoing rehabilitation of disturbed areas should be considered.				
			The management of Kerosene Vale was formerly the responsibility of Angu- however since approval of SD-5579 this is now the responsibility of WCS. A acknowledged that other than updating sediment and erosion controls (obse auditors) at the Kerosene Vale site, rehabilitation of areas other than the RC had not commenced. It is noted that Angus Place commenced works in 20 Vale to sort and clear material stockpiles and that this process was still to b time of the site inspection.				
			The following rehabilitation initiatives were noted:				
			 Evidence of recently planted saplings was observed at the Rehabilitation during the site inspection. Approximately 150 saplings had been planted <i>Casuarina</i> saplings were observed to be self-established in these arease. A report from RPS dated 12 October 2015 was available detailing the since clearance for the tailings dam expansion. The report noted that "An RH visited the site on the 1st - 2nd and 12th of June 2015 and the 12th - 1. and inspected trees requiring removal and marked those with habitat a hollows, nests etc.). An RPS ecologist was present at the site to overse on the 9th-12th of June 2015, the 18th -19th and 26th of August 2015 at September 2015. A total of 221 trees (with 356 small, 159 medium and identified as potential habitat trees were felled. Of the felled trees only occupied by fauna (all individuals were common ringtail possums Pseuperegrinus) and of these, two individuals were relocated across from the state forest. The other two self relocated in nearby vegetation to the so were left overnight prior to stockpiling" (RPS, 2015, p.4). RPS (2015, p. "At the end of felling operations no animals were injured during the wor individuals were detected, they were relocated to nearby vegetation. The present in the disturbance footprint was successfully excavated and the wombat was confirmed". 				

Compliance Status & Recommendation

ne site associated

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time of the site er 10 years ago to gement to drain to

dust generation and y comprised open be formerly stimated to be in REA was still under ressive onstruction is

us Place Colliery; WCS management served by the ROM stockpile pad 014 at Kerosene be completed at the

ion Initiative Area ted in the area. as. RPS ecologist 13th August 2015 attributes (e.g. see tree clearance and the 30th of 1 28 large hollows) four were udocheirus he site in nearby outh. Felled trees p.4) reported that orks and where The wombat burrow ne absence of the



Consolidat	Consolidated Coal Lease 733						
Conditio n No.	Condition	Evidence Source	Comment / Finding				
CCL-733- 07	Continued:	Continued:	 Continued: A report by NewEra (2015-A) noted that seed collection was conducte 2015 in remnant bushland areas of the Site. Minimal seeds were foun the area, many of the Eucalyptus had immature fruits. <i>Eucalyptus ma Eucalyptus pauciflora</i> species were identified by NewEra to have some were reported to have been collected. <i>Eucalyptus mannifera</i> trees in th Bullen forest were also collected by NewEra. NewEra (2015-A, p.7) n seeds collected will now be added to the commercially obtained seeds rehabilitation section. A portion of these seeds are to be propagated a plants will be grown in tubestock and then planted out in the rehabilitation. A report by NewEra (2015-B, p.2) noted that an inspection of rehabilitation Initiative Area) opposite the Co-Disposal Pond was cor November 2015 and that "The hydro seeding has germinated, through the cover crop being approximately 30mm high" and "All tubestock we appear to be settling in well". 				
			undertaken at Western Coal Services. No final rehabilitation has been under for several years, due to areas being required for continued operations. No trials or research are planned at Western Coal Services during the MOP te Western Coal Services plan to continue undertaking rehabilitation monitorin current rehabilitation, areas of future rehabilitation and analogue sites. Follo continued implementation of the rehabilitation monitoring program and the Western Coal Services will review opportunities to improve rehabilitation at potential future trials".				
			areas of the WCS but noting that the 2015 / 2022 MOP is very recent and r yet to commence at Kerosene Vale. Rehabilitation monitoring at Centennial sites including WCS commenced in constituted the fifth year of data acquisition for some of the monitoring sites methodology applied for the rehabilitation monitoring program (AECOM, 20 implementation of a modified version of the CSIRO developed Ecosystem I (EFA) tool, which includes the following components: Landscape Function surveys, vegetation dynamics, habitat complexity, disturbance assessment monitoring. No new transects were established as part of the 2014 program has five rehabilitation monitoring transects (CSV R1, CSV R2, CSV R3, CS R5) that were resurveyed in 2014 (AECOM, 2014). AECOM (2014, p.9) no results describe the functionality of the landscape as a biophysical system assessment of the landscape organisation (though the LOI and PAI) and of condition (through the SSCIs)".				
			 The results of the 2014 monitoring program identified that "Rehabilitation postervices differs between the sites, mostly reflecting the age of rehabilitation generally performing better. CSV R1 and CSV R5 still have a poor rehabilit rating with scores of 37 and 33, respectively. CSV R2 and CSV R3 perform scores of 54 and 41, respectively. Finally, CSV R4 is the best performing a score of 68" (AECOM, 2014, p.55). The monitoring program also noted for "Sifton bush at Coal Services which in places occurs in dense infestation preventing the establishment of desirable species"; and "St John's Wort at Coal Services in the area containing CSV R5 which need to be closely monitored" (AECOM, 2014, p.75). 				
			Continued:				

Compliance Status & Recommendation

ed on 5 September nd on the trees in *nnifera* and e seeds which he adjacent Ben oted that "The s for the nd any successful tion section". ated area (i.e. nducted on 12 hout the area, with ere observed, and

vilitation trials lertaken at the site lo rehabilitation erm, however ing for areas of lowing the subsequent data, t the site, including

itation had begun in rehabilitation had

1 2010 and 2014 s. The 014) involved the Function Analysis Analysis (LFA), rill at and photographic n of works. WCS SV R4 and CSV ote that "The LFA by providing an f the soil surface

performance at Coal on, with older sites itation performance m satisfactorily with area with good r WCS that:

ion patches

n prevalence will
Consolidat	Consolidated Coal Lease 733				
Conditio n No.	Conditi	ion	Evidence Source	Comment / Finding	
				 A number of recommendations generic to the sites were provided in the m report (AECOM, 2014). These included, but were not limited to: "Selection of appropriate species in the revegetation mix, includir strata including ground cover crops together with longer living spectra and the strate including ground cover crops together with longer living spectra but were not limited to: Use of fast growing and establishing sterile ground cover species surface during the early phase of the rehabilitation program; As a general measure, the rehabilitated areas would greatly benee / spread of organic material on the ground to enhance ground commatter. This can be in the form of brush material from local native chips, compost, etc". (AECOM, 2014, p.76). It is also noted that mitigation measures specific to each site were provide (Section 7.4) and 2013 rehabilitation monitoring reports and that these me considered relevant and should be applied to help improve the overall performance an overall site rating within the same band of values). With the exprehabilitation areas (where CSV R4 is located), the key issues undermining rehabilitation performance scores generally included: poor ground cover (including both grass cover and litter and debrinadequate vegetation community structure and composition (specinadequate vegetation canopy cover, poor habitat complexity as available to native fauna, and weed incursion". 	
CCL-733- 08	Subsid a) b) c) d) e)	ence Management The lease holder shall prepare a Subsidence Management Plan prior to commencing any underground mining operations which will potentially lead to subsidence of the land surface. Underground mining operations which will potentially lead to subsidence include secondary extraction panels such as longwalls or miniwalls, associated first workings (gateroads, installation roads and associated main headings, etc), and pillar extractions, and are otherwise defined by the Applications for Subsidence Management Approvals guidelines (EDG17) The lease holder must not commence or undertake underground morning operations that will potentially lead to subsidence other than in accordance with a Subsidence Management Plan approved by the Director-General, an approval under the Mine Health & Safety Act 2004, or the document New Subsidence Management Plan Approval Process - Transitional Provisions (EOP09). Subsidence Management Plans are to be prepared in accordance with the Guideline for Applications for Subsidence Management Approvals. Subsidence Management Plans as approved shall form part of the Mining Operations Plan required under Condition 3 and will be subject to the Annual Environmental Management Report process as set out under Condition 4. The SMP is also subject to the requirements for subsidence monitoring and reporting set out in the document New Approval Process for Management of Coal Mining Subsidence - Policy.	Site observations	WCS does not undertake mining operations. WCS is a Run-of-Mine (ROM processing plant and a reject and tailings emplacement facility comprising network operated by Springvale Coal Pty Ltd, a wholly owned subsidiary of Pty Ltd.	

Compliance Status & Recommendation

nonitoring program

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0M) coal handling and g a coal distribution of Centennial Coal

Not Activated

Consolida	Consolidated Coal Lease 733				
Conditio n No.	Condition	Evidence Source	Comment / Finding		
CCL-733- 09	Working Requirement The lease holder must: a) ensure that at least 29 competent people are efficiently employed on the lease area on each week day except Sunday or any week day that is a public holiday, OR b) expend on operations carried out in the course of prospecting or mining the lease area, an amount of not less than \$507,500.00 per annum whilst the lease is in force. The Minister may at any time or times, by instrument in writing served on the lease holder, increase or decrease the expenditure required or the number of people to be employed.	 Site observations. RPS (2013), Environmental Impact Statement Western Coal Services Project, July 2103, Ref: PR110910; Final / July 2013. 	 WCS employs up to 22 people and can operate 24 hours per day, 7 days a for the development (RPS, 2013, p.20) noted the site employed 15 full time the time of the site inspection WCS employed 17 workers. Construction costs for the new REA were not made available to the auditor EIS (RPS, 2013, p.75) notes that the capital investment for the Project was million, noting the new CHPP and haul link roads had not been constructed site inspection. Given the small size of workforce required to operate the site this condition compliant. 		
CCL-733- 10	 a) If an Environmental Officer of the Department believes that the lease holder is not complying with any provision of the Act or any condition of this lease relating to the working of the lease, he may direct the lease holder to:- i. cease working the lease; or ii. cease that part of the operation not complying with the Act or conditions; until in the opinion of the Environmental Officer the situation is rectified. b) The lease holder must comply with any direction given. The Director-General may confirm, vary or revoke any such direction. c) A direction referred to in this condition may be served on the Mine Manager. 	-	WCS management reported that there had been no orders to cease workin cease that part of the operation not complying with the Act or conditions; un the Environmental Officer the situation is rectified.		
CCL-733- 11	 Reports The lease holder must provide an exploration report, within a period of twenty-eight days after each anniversary of the date this lease has effect or at such other date as the Director-General may stipulate, of each year. The report must be to the satisfaction of the Director-General and contain the following: a) Full particulars, including results, interpretation and conclusions, of all exploration conducted during the twelve months period; b) Details of expenditure incurred in conducting that exploration; c) A summary of all geological findings acquired through mining or development evaluation activities; d) Particulars of exploration proposed to be conducted in the next twelve months period; e) All plans, maps, sections and other data necessary to satisfactorily interpret the report. 	-	WCS management reported that there had been no exploration activities ca site during the audit period. WCS is a Run-of-Mine (ROM) coal handling ar and a reject and tailings emplacement facility comprising a coal distribution MCW Environmental consider that this condition was not activated during t		
CCL-733- 12	 Licence to Use Reports a) The lease holder grants to the Minister, by way of a non-exclusive licence, the right in copyright to publish, print, adapt and reproduce all exploration reports lodged in any form and for the full duration of copyright. b) The non-exclusive licence will operate as consent for the purposes of section 365 of the Mining Act 1992. 	-	Noted		

	Compliance Status & Recommendation
a week. The EIS ne employees. At	Compliant
ors; however, the as in excess of \$30 ed at the time of the	
on was found to be	
ing the lease or until in the opinion of	Not Activated

onducted at the Not Activated and processing plant n network.

the audit period.

Noted

Consolidat	Consolidated Coal Lease 733				
Conditio n No.	Condition	Evidence Source	Comment / Finding		
CCL-733- 13	 Confidentiality All exploration reports submitted in accordance with the conditions of this lease will be kept confidential while the lease is in force, except in cases where: the lease holder has agreed that specified reports may be made non confidential. ii. reports deal with exploration conducted exclusively on areas that have ceased to be part of the lease. b) Confidentiality will be continued beyond the termination of a lease where an application for a flow-on title was lodged during the currency 	-	Noted		
	 of the lease. The confidentiality will last until that flow-on title or any subsequent flow-on title, has terminated. c) The Director-General may extend the period of confidentiality. 				
CCL-733- 14	 Terms of the non-exclusive licence The terms of the non-exclusive copyright licence granted under condition 12 are: a) the Minister may sub-licence others to publish, print, adapt and reproduce but not on-licence reports. b) the Minister and any sub-licensee will acknowledge the lease holder's and any identifiable consultant's ownership of copyright in any reproduction of the reports, including storage of reports onto an electronic database. c) the lease holder does not warrant ownership of all copyright works in any report and, the lease holder will use best endeavours to identify those parts of the report for which the lease holder owns the copyright. d) there is no royalty payable by the Minister for the licence. e) if the lease holder has reasonable grounds to believe that the Minister has exercised his rights under the non-exclusive copyright licence in a manner which adversely affects the operations of the lease holder, that licence is revocable on the giving of a period of not less than three months notice. 	-	Noted		
CCL-733- 15	 Blasting a) Ground Vibration The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise by the Department of Environment and Climate Change. b) Blast Overpressure The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise by the Department of Environment and Climate Change. 	-	WCS management reported that no blasting is conducted at WCS. WCS (ROM) coal handling and processing plant and a reject and tailings emplar comprising a coal distribution network.		
CCL-733- 16	Safety Operations must be carried out in a manner that ensures the safety of persons or stock in the vicinity of the operations. All drill holes shafts and excavations must be appropriately protected, to the satisfaction of the Director-General, to ensure that access to them by persons and stock is restricted. Abandoned shafts and excavations opened up or used by the lease holder must be filled in or otherwise rendered safe to a standard acceptable to the Director-General.	Site observations	New gates were observed at the access points to Kerosene Vale. Portals were observed to be sealed. No open shafts or excavations observed at WCS; however, access inside one of the derelict portal buildings on the si		



Noted

is a Run-of-Mine acement facility

Not Activated

s at Kerosene Vale Kerosene Vale or ite was possible.

Compliant

REC-2016-41 – Restrict access to the derelict portal building at Kerosene Vale.

Consolidat	Consolidated Coal Lease 733						
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance State Recommendation			
CCL-733- 17	 a) At least twenty eight days prior to commencement of drilling operations the lease holder must notify the relevant Department of Water and Energy Regional Hydrologist of the intention to drill exploratory drill holes together with information on the location of the proposed holes. b) If the lease holder drills exploratory drill holes he must satisfy the Director- General that: a) all cored holes are accurately surveyed and permanently marked in accordance with Departmental guidelines so that their location can be easily established; ii. all cored holes are permanently sealed to prevent the collapse of the surrounding surface; iii. all drill holes are permanently sealed with cement plugs to prevent surface discharge of groundwaters; iv. if any drill hole meets an artesian or sub-artesian flow it is effectively sealed to prevent contamination of aquifers. vi. once any drill hole ceases to be used the hole must be sealed in accordance with Departmental guidelines. Alternatively, the hole must be sealed as instructed by the Director-General. 	-	WCS management reported that there had been no exploration activities conducted at the site during the audit period. WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reject and tailings emplacement facility comprising a coal distribution network. MCW Environmental consider that this condition was not activated during the audit period.	Not Activated			
CCL-733- 18	Prevention of Soil Erosion and Pollution Operations must be carried out in a manner that does not cause or aggravate air pollution, water pollution (including sedimentation) or soil contamination or erosion, unless otherwise authorised by a relevant approval, and in accordance with an accepted Mining Operations Plan. For the purpose of this condition, water shall be taken to include any watercourse, waterbody or groundwaters. The lease holder must observe and perform any instructions given by the Director-General in this regard.	 AECOM (2014), Targeted Phase 2 Environmental Site Assessment, 22 October 2014, Ref: 60326953. Email – Centennial (2015), Phase 2 Environmental Site Assessment at Western Coal Services [Sent: 02/06/2015 @ 3:58pm] to EPA. ALS Website (2015) Lidsdale Mine LDP004, Available at: https://portal.alsglobal.com/we b.htm [Accessed 27/01/2016 at 14:25hrs] Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.XIs – 08/01/2015 to 03/12/2015. Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. 	 A Targeted Phase 2 Environmental Site Assessment (ESA) was conducted at the site between June and August 2014 (AECOM, 2014) i.e. within four months of April 2014.). AECOM (2014, p.III) identified that "Based on the field observations and review of analytical data, no gross contamination was identified that would preclude the proposed development without first initiating remedial activities". The following recommendations were made in the Phase 2 ESA: <i>"Continue monthly surface water monitoring at the Site.</i> <i>Further investigation of heavy metal contamination of sediments in Wangcol Creek, with particular regard to assessing sediment quality far up stream and far down stream of the Site.</i> <i>Improve housekeeping practices to minimise spills in and around the oil store"</i> (AECOM, 2014, p.III). Surface water monitoring is conducted at the site and improvements to the oil store were observed during the site inspection. Sediment and erosion controls were observed during the site inspection in the form of rock dams and straw bales (LDP-006). Evidence that the structures had been constructed in general accordance with the series Managing Urban Stormwater: Soils and Construction including Volume 1, Volume 2A – Installation of Services and Volume 2C could not be confirmed. Commentary on water pollution from the site is covered in the EPL compliance checklist. 	Compliant			
CCL-733- 19	Transmission lines, Communication lines and Pipelines Operations must not interfere with or impair the stability or efficiency of any transmission line, communication line, pipeline or any other utility on the lease area without the prior written approval of the Director-General and subject to any conditions he may stipulate.	Site observations	WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reject and tailings emplacement facility comprising a coal distribution network therefore site activities are unlikely to undermine the stability of a transmission line, communication line, pipeline or any other utility. No interference with utilities was noted as part of the site inspection.	Compliant			
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Consolida	ed Coal Lease 733		
Conditio n No.	Condition	Evidence Source	Comment / Finding
CCL-733- 20	 Fences, Gates a) Activities on the lease must not interfere with or damage fences without the prior written approval of the owner thereof or the Minister and subject to any conditions the Minister may stipulate. b) Gates within the lease area must be closed or left open in accordance with the requirements of the landholder. 	Site observations	The WCS overland conveyor is located on a number of leases with access and private roads. WCS management reported that there are no fences of surface operations under their control and there was no observed damage in the lease areas during the site inspection. New gates were observed at the access points to Kerosene Vale.
CCL-733- 21	 Roads and Tracks a) Operations must not affect any road unless in accordance with an accepted Mining Operations Plan or with the prior written approval of the Director-General and subject to any conditions he may stipulate. b) The lease holder must pay to the designated authority in control of the road (generally the local council or the Roads and Traffic Authority) the cost incurred in fixing any damage to roads caused by operations carried out under the lease, less any amount paid or payable from the Mine Subsidence Compensation Fund. 	 Site observations Central West Line Marking Quotation, 7 August 2014. Barnson Pty Ltd Invoice, 30 November 2014. 	 a) Observations and discussions with WCS indicated that operation affect roads within the lease. b) No costs were reported by WCS to have been required to addre roads caused by operations carried out under the lease. Line markings were observed at the intersection of the Castlereagh High Access Road during the site inspection.
CCL-733- 22	Access Tracks Access tracks must be kept to a minimum and be positioned so that they do not cause any unnecessary damage to the land. Temporary access tracks must be ripped, topsoiled and revegetated as soon as possible after they are no longer required for mining operations. The design and construction of access tracks must be in accordance with specifications fixed by the Department of Environment and Climate Change.	Site observations	WCS generally uses private and public roads to access the overland con- track was located adjacent to the overland conveyor for maintenance pur From site observations it appeared that access tracks by WCS were kept
CCL-733- 23	 Trees and Timber a) The lease holder must not fell trees, strip bark or cut timber on the lease without the consent of the landholder who is entitled to the use of the timber, or if such a landholder refuses consent or attaches unreasonable conditions to the consent, without the approval of a warden. b) The lease holder must not cut, destroy, ringbark or remove any timber or other vegetative cover on the lease area except such as directly obstructs or prevents the carrying on of operations. Any clearing not authorised under the Mining Act 1992 must comply with the provisions of the Native Vegetation Act 2003. c) The lease holder must obtain all necessary approvals or licences before using timber from any Crown land within the lease area. 	 RPS Australia (2015), Tree Clearance Supervision For Tailings Dam Expansion, Western Coal Services, 12 October 2015, Ref; 127341:DW:AB. NewEra (2015-A) Follow Up Report Coal Services Revegetation Works, 15 November 2015. NewEra (2015-B) Follow Up Report Coal Services Revegetation Works, 15 November 2015. 	 a) The owner of the leased area is Crown land. The area of land occup cleared prior to the audit period. Infrastructure on CCL 733 consists stockpile, overland conveyors, dams and previously rehabilitated are surface operations. b) It is understood that there were no trees removed from CCL 733 duri however, trees were removed from the adjoining ML 1448 during the Clearing on ML 1448 was reported to have been conducted in accord approvals. A report from RPS dated 12 October 2015 was available supervision of tree clearance for the tailings dam expansion. The rep <i>RPS ecologist visited the site on the 1st - 2nd and 12th of June 2015</i>. <i>August 2015 and inspected trees requiring removal and marked thos attributes (e.g. hollows, nests etc.). An RPS ecologist was present at tree clearance on the 9th-12th of June 2015, the 18th -19th and 26th the 30th of September 2015. A total of 221 trees (with 356 small, 155 large hollows) identified as potential habitat trees were felled." (RPS,</i>

WCS management reported that it does not use timber from the lease areas.

ort: IEA Western Coal Services	A-93
Compliance Status & Recommendation	

ess provided via public Compliant outside of the ge to fences or gates

ons did not generally Compliant ess any damage to way and the WCS

nveyor. An access rposes.

Compliant

t to a minimum.

pied by CCL 733 was Compliant s of the CHPP, eas to the south of ring the audit period; e audit period. rdance with existing e detailing the port noted that "An 5 and the 12th - 13th se with habitat t the site to oversee

h of August 2015 and 9 medium and 28 , 2015, p.4).

Consolidat	consolidated Coal Lease 733				
Conditio n No.	Condition	Evidence Source	Comment / Finding		
CCL-733- 25	Resource Recovery a) Notwithstanding any description of mining methods and their sequence or of proposed resource recovery contained within the Mining Operations Plan, if at any time the Director-General is of the opinion that minerals which the lease entitles the lease holder to mine and which are economically recoverable at the time are not being recovered from the lease area, or that any such minerals which are being recovered are not being recovered to the extent which should be economically possible or which for environmental reasons are necessary to be recovered, he may give notice in writing to the lease holder requiring the holder to recover such minerals.	-	WCS is a Run-of-Mine (ROM) coal handling and processing plant and a emplacement facility comprising a coal distribution network.		
	b) The notice shall specify the minerals to be recovered and the extent to which they are to be recovered, or the objectives in regard to resource recovery, but shall not specify the processes the lease holder shall use to achieve the specified recovery.				
	c) The lease holder must, when requested by the Director-General, provide such information as the Director-General may specify about the recovery of the mineral resources of the lease area.				
	d) The Director-General shall issue no such notice unless the matter has firstly been thoroughly discussed with and a report to the Director-General has incorporated the views of the lease holder.				
	e) The lease holder may object to the requirements of any notice issued under this condition and on receipt of such an objection the Minister shall refer it to a Warden for inquiry and report under Section 334 of the Mining Act, 1992.				
	f) After considering the Warden's report the Minister shall decide whether to withdraw, modify or maintain the requirements specified in the original notice and shall give the lease holder written notice of the decision. The lease holder must comply with the requirements of this notice.				
CCL-733-	Indemnity	-	WCS management reported that there have been no claims, actions, suit		
20	The lease holder must indemnify and keep indemnified the Crown from and against all actions, suits, claims and demands of whatsoever nature and all costs, charges and expenses which may be brought against the lease holder or which the lease holder may incur in respect of any accident or injury to any person or property which may arise out of the construction, maintenance or working of any workings now existing or to be made by the lease holder within the lease area or in connection with any of the operations notwithstanding that all other conditions of this lease		prougni against the lease holder and as such this requirement has not be		

licensed or compelled to do.

shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease holder may be



its or demands een triggered.

Not Activated

Consolida	Consolidated Coal Lease 733					
Conditio n No.	Condition	Evidence Source	Comment / Finding			
CCL-733- 28	 Security a) The single security given and maintained with the Minister by the lease holder of obligations under Mineral Leases No's. 204 and 564 and Private Lands Lease No. 133 (Act 1906), Consolidated Coal Lease No. 733 and Coal Lease No's. 361 and 394 (Act 1973) and Mining Lease No. 1319 (Act 1992) Coal Lease No. 377 and Mining Purposes Lease No. 314 (Act 1973) and Mining Leases No's 1303, 1323, 1326, 1352, 1448, 1537 and 1588 (Act, 1992) is extended to apply to the renewal of this lease. b) If the lease holder fails to fulfil any one or more of the obligations under this lease, then the security held may be applied at the discretion of the Minister towards the cost of fulfilling such obligations. For the purpose of this clause the lease holder fails to comply with any condition or provision hereof, any provision of the Act or regulations made thereunder. c) The lease holder must provide the security required by sub-clause a) in one of the following forms: a) <i>a</i> security certificate in a form approved by the Minister and issued by an authorised deposit-taking institution 	 Letter – Centennial (2014), Springvale Colliery, Lamberts Gully & Western Main Colliery Amended Joint Security, 24 October 2014. Deed of Security Deposit Bond – Bank Guarantee No DG373553418, 23 October 2014 for \$6,384,000. 	 WCS provided a copy of a letter to DRE dated 24 October 2014 that include Security Deposit Bond for the amount of \$6,384,000. The letter noted that is Security Deposit Bond together increased the joint security to \$12,768,000. The Deed of Security Deposit Bond covered leases CCL 733, ML 1448, ML 314. A Deed of Security Deposit Bond – Bank Guarantee No DG373553418, 23 \$6,384,000 was sighted. MCW Environmental did not undertake any assessment of accuracy or ade Calculation. 			
CCL-733- 30	Suspension of Mining Operations The holder of a consolidated mining lease may not suspend mining operations in the mining area other than in accordance with the consent of the Minister.	-	Mining operations have not been suspended during the audit period.			
CCL-733- 31	Cooperation Agreement The licence holder must make every reasonable attempt, and be able to demonstrate their attempts, to enter into a cooperation agreement with the holder(s) of any overlapping petroleum 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.	Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022.	There are no overlapping petroleum titles; hence the requirement of Cooper has not been triggered.			

	Compliance Status & Recommendation
ded a new Deed of It the Deed of 0. /IL 1352 and ML	Compliant
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dequacy of the Bond	
	Not Activated
peration Agreement	Not Activated

Conditio n No.	Condition	Evidence Source	Comment / Finding
CCL-733- 32	 Catchment Areas a) The lease holder shall carry out operations in such a way as to conform strictly to all provisions of the Sydney Water Catchment Management Act 1998 and the regulations thereunder applying to the prevention of pollution of the Warragamba Outer Catchment Area or the preservation of the purity of the water supply provided thereby or derived therefrom or for the protection of the property of Sydney Catchment Authority [hereinafter referred to as the 'the Authority] on the Outer/ Catchment Area and also to all requirements of the Authority from time to time under the said Act or any of the regulations for the time being in force. b) If the lease holder shall at any time be using or about to use any process which in the opinion of the Authority is likely to pollute the Outer Catchment Area or the water supply or to endanger any property of the Authority on the Outer Catchment Area athe lease holder upon service of a notice in writing under the hand of the Minister to do so shall: i. discontinue the use of such process immediately, or ii. thereafter refrain from adopting such process at any time, as the case may require. c) The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent the contamination, pollution, erosion or siltation of any stream or watercourse or Outer Catchment Area. d) The lease holder hereby covenants with Us Ours Heirs and Successors and as a separate covenant the lease holder shall all times hereafter save harmless and keep Us and the said Authority and Our Heirs and Successors to the lease holder hereby covenants with the Authority and its Successors of the said Authority and Our Heirs and Successors to the land and premises of this authority which may occur by reason of any works or operations undertaken or carried out by the said Authority or arising out of or in any way connected with any interference with or deprivation or loss of access to the land a	 RPS (2014), Centennial Western Coal Services Project Water Management Plan, August 2014, Ref: S167I/011e. Email – Centennial (2014), WCS Water Management Plan to thee Sydney Catchment Authority (SCA), 29/07/2014 @ 08:14am. 	 a) A detailed assessment of the operations against the Sydney Wath Management Act 1998 has not been undertaken by the site, or by part of this audit. WCS indicated that they consult with SCA wher relevant plans such as the Water Management Plan have been su SCA for their review. Email evidence of the SCA having been sen Management Plan (29/07/2014) was sighted. b) Not Triggered – No notice provided. Water discharged from the of to creeks that eventually report to Coxs River. c) Management of water is conducted as per the Site Water Manage 2014)) and EPL 3607 requirements. A review of compliance with assesses performance of the site against the EPL requirements at this Appendix. Water management activities are also reported in t Review(s). Some non compliances were observed and discharge noted to have elevated salinity levels. To date there has been no satisfaction from the Minister and no instruction has been given by a view to preventing or minimising the contamination, pollution or stream watercourse or Outer Catchment Area. WCS have comminvestigations into the site water balance and the separation of cle as discussed in the EPL Compliance review. d) Noted. e) No directions are understood to have been issued by the EP/ sanitation works. Septic tanks are located at the Control Ro Room. No camps or habitations were observed in the area or known iii. According to WCS, no boreholes were drilled within the area v. According to WCS, no boreholes were drilled within the area v. According to WCS, no boreholes were drilled within the area v. According to WCS there are no SCA tracks in the area – Not vi. WCS indicated that there has been no roads constructed dur period. Not Triggered. No drilling operations conducted in the catchment during the Triggered. No drilling operations conducted in the catchment during the Triggered. No triggered. No triggered. No triggered. WCS was found to be gener

er Catchment / the auditors as n required and that ubmitted to the nt the Water

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ement Plan (RPS, the EPL 3607 and is presented in he Annual e at LDP-006 was evidence of lack of y the Minister with siltation of any nissioned further ean and dirty water

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es elevated salinity in the Development

Compliance Status & Recommendation

Compliant

REC-2016-42 - It is recommended that site review the requirements of the Sydney Water Catchment Management Act 1998 and ensure that all conditions of the Act as relevant to operations at WCS are being complied with.

Refer to other recommendations regarding water management as relevant.

Consolidat	Consolidated Coal Lease 733						
Conditio n No.	Condition		Evidence Source	Comment / Finding			
	f) The lease h i. ii. ii. iv. v. v. vi. vii. vii. x.	older shall: Make such provisions for sanitation as may be directed by the Authority and shall at all times observe and perform any requirements of the said Authority respecting sanitation. Not establish any camps or habitations within any area under the control of the Authority unless with the consent of the Authority. Not sink any drillhole within the stored waters on the subject area nor within 40 metres of the top water level thereof unless with the consent of the Authority. Not sink any drillhole within any watercourse on the Warragamba Outer Catchment Area nor within 100 metres thereof unless with the consent of the Authority. Not interfere with or impede the use of the Authority tracks of endanger their stability in any way by reason of the operations unless with the consent of the Authority. Not construct any road to the sites of any drillholes unless with the consent of the Authority. Not construct any road to the sites of on or adjacent to the Warragamba Outer Catchment Area unless with the consent in writing of the owner thereof or the Authority. Give twenty eight days notice to the General Manager, Catchment Operations and Major Projects, Sydney Catchment Authority, Penrith, of its intention to commence drilling operations. Not cut or remove any timber except such as directly obstructs or prevents the carrying on of operations and the lease holder shall obtain the consent in writing of the Authority before making use of the timber so cut for other than in connection with operations. Complete work in relation to rehabilitation within the Warragamba Outer Catchment Area before termination of the authority to the satisfaction of the Authority.					



Compliance Status & Recommendation

Mining Lease 1352							
Conditio n No.	Condition	Evidence Source	Comment / Finding				Compliance Status & Recommendation
ML-1352- 01	 Notice to Landholders a) 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 	 Letter – Centennial (2014-A), Notification to Landholder of Renewal of ML 204, 30 May 2014. Letter – Centennial (2014-B), Notification to Landholder of Renewal of ML 1319, 5 June 2011 	Letters from Centennial to landh Australia, Forests NSW, local re- lease were available for review f audit period. WCS was found to landholders was provided and th	Letters from Centennial to landholders including, Crown Lands Division, RMS, Energy Australia, Forests NSW, local resident(s), Transport for NSW informing of the renewal of the lease were available for review for leases ML 1352 and ML 314 that were renewed during the audit period. WCS was found to be compliant with this condition as evidence of notification to landholders was provided and the intent to notify landholders was evident.			Compliant
	whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of		Lease	Date Granted	Renewal Date	Expiry Date	
	the lease area must accompany the notice.b) If there are ten or more landholders, the lease holder may serve the notice	 Letter – Centennial (2014-C), Notification to Landholder of 	Consolidated Coal Lease 733	23 May 1990	23 December 2008	3 July 2027	
	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	Renewal of ML 314, 23 September 2014.	Mining Lease 1352	26 May 1994	2 March 2015	22 June 2036	
	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	 Letter – Centennial (2014-D), Notification to Landholder of 	Mining Lease 1448	31 May 1999	-	-	
	condition 1(b), compliance with condition 1(a) is not required.	Renewal of ML 1352, 1 December 2014.	Mining Lease 314	3 August 1993	16 June 2014	3 August 2035	
ML-1352- 02	Rehabilitation Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	-	Refer to CCL-733, Condition	n 7.			Compliant
/IL-1352-	Mining Operations Plan and Annual Rehabilitation Report	-	Refer to CCL-733, Conditior	n 3.			Compliant
)3	 a) 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. b) The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: xi. identifies areas that will be disturbed; xii. details the staging of specific mining operations, mining purposes and prospecting; xiii. identifies how the mine will be managed and rehabilitated to achieve the post mining land use; xiv. identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and xv. reflects the conditions of approval under: 						
	 1979; the Protection of the Environment Operations Act 1997; and 						
	 any other approvals relevant to the development including the conditions of this mining lease. 						
	 c) The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at www.resources.nsw.gov.au/environment d) The lease holder may apply to the Minister to amend an approved MOP at 						

Mining Lea	lining Lease 1352					
Conditio n No.	Condition	Evidence Source	Comment / Finding			
	 e) It is not a breach of this condition if: 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 Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Mine Health and Safety Act 2004 I Coal Mine Health and Safety Act 2002 and Mine Health and Safety Regulation 2007 I Coal Mine Health and Safety Regulation 2007 I Coal Mine Health and Safety Regulation 2006 or the Work Health and Safety Act 2011; and 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. f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resources.nsw.gov.au/environment. 					
	Note: The Rehabilitation Report replaces the Annual Environmental Management Report.					

Compliance Status & Recommendation



Mining Lea	Mining Lease 1352						
Conditio n No.	Condition	Evidence Source	Comment / Finding				
ML-1352- 04	 Compliance Report a) The lease holder must submit a Compliance Report to the satisfaction the Minister. The report must be prepared in accordance with any releguidelines or requirements published by the Minister for compliance reporting. b) The Compliance Report must include: i. the extent to which the conditions of this mining lease or provisions of the Act or the regulations applicable to active under this mining lease, have or have not been complied with; ii. particulars of any non-compliance with any such condition or provisions, iii. the reasons for any such non-compliance; iv. any action taken, or to be taken, to prevent any recurrent or to mitigate the effects, of that non-compliance. c) The Compliance Report must be lodged with the Department annually the grant anniversary date for the life of this mining lease. d) In addition to annual lodgement under condition 14(c) above, a Complia Report: i. 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. e) Despite the submission of any Compliance Report under (c) or (d) abot the titleholder must lodge a Compliance Report with the Department at date or dates otherwise required by the Minister. f) A Compliance Report must be submitted one month prior to the expiry this mining lease, where the licence holder is not seeking to renew or cancel this mining lease. 	 Centennial (2015-A), WCS – Annual Review 2014, 23 April 2015. Letter – Centennial (2015-B), WCS - Annual Review, 23 Apri 2015. Letter – Centennial (2015-C), WCS Annual Environmental Management Report, 27 February 2015. Letter – DP&E (2015), WCS – Annual Review 2014, 20 s March 2015. 	 The Annual Review was submitted to DP&E on 27 February 2015 (Centenn DP&E responded to WCS on 20 March 2015 requesting further information i concerning: Condition 17, Schedule 3 – Prepare and Implement a revised Air Qualit Plan. Condition 4, Schedule 2 - Resubmit compliance performance informatic of the Annual Review. Condition 8, Schedule 3 – Implement best practice to minimise construct and road noise. Provide detailed plan of noise mitigation measures. Condition 3, Schedule 4 - Demonstrate compliance with notifying pote: Centennial responded to DP&E in a letter dated 23 April 2015 (Centennial, 2 management plans where requested had been updated and were attached 1 Centennial letter also included noise information as requested by DP&E not directional noise monitoring and engagement with landowners if attenuation required at properties citing the installation of double glazing at residential lc The following is noted concerning the 2014 Annual Review: m) The 2014 Annual Review included descriptions of the developments du period (Section 2). n) The 2014 Annual Review included monitoring results for the calendar ya a comparison against statutory requirements were provided in Section 3 on Non-compliances were noted in the 2014 Annual Review for the review period. M od iscrepancies were noted in the 2014 Annual Review for the reporting the actions that were (or are being taken) to ensure of the Annual Review. These included, but were not limited to: "Continuation of the upgrade to the water management system;" Continue investigation into water management issues associated w and DML Dam; Further consultation with Energy Australia regarding the proposed area at Western Coal Services; Rehabilitation maintenance works as required; Routine weed spraying program; Preparation and approval of the new MOP; and Continuation of the Centennial Western Region CCC". 				

Compliance Status & Recommendation

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Mining Lea	Mining Lease 1352						
Conditio n No.	Cor	ndition	Evidence Source	Comment / Finding	Compliance Status & Recommendation		
n No. ML-1352- 05	Cor Env a) b)	 fironmental Incident Report The lease holder must notify the Department of all: breaches of the -conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the Protection of the Environment Operations, Act 1997), 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. Note. Refer to www.resources.nsw.qov.au/environment for notification contact details. 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: the details of the mining lease; contact details for the lease holder; a map identifying the location of the incident and where material harm to the environment has or is likely to occur; a description of the nature of the incident or breach, likely causes and consequences; a timetable showing actions taken or planned to address the incident and to prevent future incidents or breaches referred to in S(a). a summary of all previous incidents or breaches which have occurred in the previous 12 months relating to significant surface disturbing activities, including mining operations, mining purposes and prospecting operations under this mining lease. 		Comment 7 Finding WCS management reported that there have not been any incidents that have: (a) Caused or threatened to cause actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial harm to the environment; and/or (b) Breached or exceeded the limits or performance measures/criteria in this consent. Therefore no incident report has been provided to the Director-General and any other relevant agencies. The auditors sighted screenshots of the ECD Lotus Notes database that provided a summary of Centennial Coal defined Level 1-5 incidents for the audit period (Refer to Section 5.2 of the Report for further details).	Recommendation Not Activated		
	C)	holder must immediately advise the Department of any notification made under section 148 of the Protection of the Environment Operations Act 1997 arising in connection with significant surface disturbing activities including mining operations, mining purposes and prospecting operations, under this mining lease.					
ML-1352- 06		NOT USED					
ML-1352- 07		NOT USED					

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Mining Lea	ise 1352		
Conditio n No.	Condition	Evidence Source	Comment / Finding
ML-1352- 08	 Group Security 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 as a group security has been assessed by the Minister at \$12,768,000. The leases covered by the group security include: ML 204 (Act 1906), ML 564 (Act 1906), PLL 133 (Act 1906), CCL 733 (Act 1973), CL 361 (Act 1973), CL 377 (Act 1973), CL 394 (Act 1973), MPL 314 (Act 1973), ML 1303 (Act 1992), ML 1319 (Act 1992), ML 1323 (Act 1992), ML 1326 (Act 1992), ML 1448 (Act 1992), ML 1537 (Act 1992), ML 1588 (Act 1992) and ML 1670 (Act 1992). 	 Letter – Centennial (2014), Springvale Colliery, Lamberts Gully & Western Main Colliery Amended Joint Security, 24 October 2014. Deed of Security Bond – Bank Guarantee No DG373553418, 23 October 2014 for \$6,384,000. 	WCS provided a copy of a letter to DRE dated 24 October 2014 that includ Security Deposit Bond for the amount of \$6,384,000. The letter noted that Security Deposit Bond together increased the joint security to \$12,768,000 The Deed of Security Deposit Bond covered leases CCL 733, ML 1448, M 314.
ML-1352- 09	 Cooperation Agreement 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) 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. 	Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022.	There are no overlapping petroleum titles; hence the requirement of C Agreement has not been triggered.
	 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). 	-	WCS management reported that there had been no exploration activities of site during the audit period. WCS is a Run-of-Mine (ROM) coal handling a and a reject and tailings emplacement facility comprising a coal distribution MCW Environmental consider that this condition not to have been activate period.
	Special Conditions Note: The standard conditions apply to all mining leases. The Division of Resources & Energy (DRE) reserves the right to impose special conditions, based on individual circumstances, where appropriate.	-	Noted

	Compliance Status & Recommendation
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Mining Lea	ining Lease 1448						
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation			
ML-1448- 01	Extraction of Coal The lease holder shall extract as large a percentage of the coal in the subject area as is practicable consistent with the provisions of the Coal Mines Regulations Act 1982 and the Regulations thereunder and shall comply with any direction given or which may be given in this regard by the Minister.	-	WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reject and tailings emplacement facility comprising a coal distribution network.	Not Activated			
ML-1448-)2	 Mining, Rehabilitation, Environmental Management Process (MREMP) Mining Operations Plan (MOP) 1. Mining operations, including mining purposes, must be conducted in accordance with a Mining Operations Plan (the Plan) satisfactory to the Director-General. The Plan together with environmental conditions of development consent and other approvals will form the basis for:- a) ongoing mining operations and environmental management; and b) ongoing monitoring of the project. 2. The Plan must be prepared in accordance with the Director-General's guidelines current at the time of lodgement. 3. A Plan must be lodged with the Director-General:- a) prior to the commencement of operations; b) subsequently as appropriate prior to the expiry of any current Plan; and c) in accordance with any direction issued by the Director-General. 4. The Plan must present a schedule of proposed mine development for a period of up ' to seven (7) years and contain diagrams and documentation which identify:- a) area(s) proposed to be disturbed under the Plan; b) mining and rehabilitation method(s) to be used and their sequence; c) a reas to be used for disposal of tailings/waste; d) existing and proposed surface infrastructure; e) progressive rehabilitation schedules; f) areas of particular environmental sensitivity; g) water management systems (including erosion and sediment controls); h) proposed resource recovery; and i) where the mine will cease extraction during the term of the Plan, a closure plan including final rehabilitation objectives/methods and post mining and rehabilitation objectives/methods and post mining and rehabilitien objectives/methods and post mining and rehabilitation objectives/methods and post mining and rehabilitation schedules; 		Refer to CCL-733, Condition 3.	Compliant			
	 The Plan when lodged will be reviewed by the Department of Mineral Resources. The Director-General may within two (2) months of the lodgement of a Plan, require modification and relodgement. If a requirement in accordance with clause (6) is not issued within two months of the lodgement of a Plan, lease holder may proceed with implementation of the Plan submitted subject to the lodgement of the required security deposit within the specified time. During the life of the Mining Operations Plan, proposed modifications to the Plan must be lodged with the Director-General and will be subject to the review process outlined in (5) - (7) above. 						



Mining Lea	ise 1448		
Conditio n No.	Condition	Evidence Source	Comment / Finding
ML-1448- 03	 Annual Environmental Management Report (AEMR) 1. Within 12 months of the commencement of mining operations and thereafter annually or, at such other times as may be allowed by the Director-General, the lease holder must lodge an Annual Environmental Management Report (AEMR) with the Director-General. 2. The AEMR must be prepared in accordance with the Director-General's guidelines current at the time of reporting and contain a review and forecast of performance for the preceding and ensuing twelve months in terms of: a) the accepted Mining Operations Plan; b) development consent requirements and conditions; c) Environment Protection Authority and Department of Land and Water Conservation licences and approvals; d) any other statutory environmental requirements; e) details of any variations to environmental approvals applicable to the lease noder to undertake operations, remedial actions or supplementary studies in the manner and within the period specified in the notice to ensure that operations on the lease area are conducted in accordance with sound mining and environmental practice. 	 Centennial (2015-A), WCS – Annual Review 2014, 23 April 2015. Letter – Centennial (2015-B), WCS - Annual Review, 23 April 2015. Letter – Centennial (2015-C), WCS Annual Environmental Management Report, 27 February 2015. Letter – DP&E (2015), WCS – Annual Review 2014, 20 March 2015. 	 The Annual Review was submitted to DP&E on 27 February 2015 (Center DP&E responded to WCS on 20 March 2015 requesting further information concerning: Condition 17, Schedule 3 – Prepare and Implement a revised Air Qua Plan. Condition 8, Schedule 2 - Resubmit compliance performance information of the Annual Review. Condition 8, Schedule 3 – Implement best practice to minimise constrand of the Annual Review. Condition 8, Schedule 4 - Demonstrate compliance with notifying pol Centennial responded to DP&E in a letter dated 23 April 2015 (Centennial management plans where requested had been updated and were attachee Centennial letter also included noise information as requested by DP&E mindirectional noise monitoring and engagement with landowners if attenuatic required at properties citing the installation of double glazing at residential The following is noted concerning the 2014 Annual Review: The 2014 Annual Review included monitoring results for the calendar a comparison against statutory requirements were provided in Section 2). The 2014 Annual Review included monitoring dual for the review period. Non-compliances were noted in the 2014 Annual Review for the report of the Annual Review. Sincluded trends in the monitoring data for the review period. Weasures that will be implemented in the next reporting period were in of the Annual Review. These included, but were not limited to: "Continuation of the upgrade to the water management system;" Continuation of the upgrade to the water management system; Continuation of the upgrade to the water management system; Continue investigation into water management issues associated and DML Dam; Further consultation with Energy Australia regarding the propose area at Western Coal Services; Rehabilitation maintenance works as required; Routine weed spraying
ML-1448- 14	Shafts, Drifts, Adits Operations shall be conducted in such a manner as not to cause any danger to persons or stock and the lease holder shall provide and maintain adequate protection to the satisfaction of the Minister around each shaft or excavation opened up or used by the lease holder.	Site observations	New gates were observed at the access points to Kerosene Vale. Po Vale were observed to be sealed. No open shafts or excavations obs Vale or WCS; however, access inside one of the derelict buildings on possible.
ML-1448- 15	Dumps The lease holder shall comply with any direction, given or which may be given by the Inspector regarding the dumping, depositing or removal of material extracted as well as the stabilisation and revegetation of any dumps of coal, minerals, mine residues, tailings or overburden situated on the subject area or the associated colliery holding.	-	WCS management reported they had not been directed by the Inspec dumping, depositing or removal of material extracted as well as the st revegetation of any dumps of coal, minerals, mine residues, tailings o situated on the subject area during the audit period.

	Compliance Status & Recommendation
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 Portals at Kerosene s observed at Kerosene gs on the site was 	Compliant
nspector concerning the the stabilisation and ngs or overburden	Not Activated

Mining Lea	Mining Lease 1448						
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation			
ML-1448- 16	The lease holder shall comply with any direction given or which may be given by the Minister regarding the spraying of coal dumps on the subject area.	-	WCS management reported they had not been directed by the Inspector concerning the spraying of coal dumps during the audit period.	Not Activated			
ML-1448- 17	Dust The lease holder shall take such precautions as are necessary to abate any dust nuisance.	 SLR Consulting Ambient Test Reports -610.11391.00400- TR4, 610.11391.00400-TR5, 610.11391.00400-TR6, 610.11391.00400-TR10, 610.11391.00400-TR11, 610.11391.00400-TR12 Pinedale Dust Data.xls - 23/03/2014 to 31/12/2015. WCS Dust Data.xls - 18/03/2014 to 23/11/2015 ^{Note} 1. Centennial (2015) Springvale Coal Services Environmental Monitoring Data, November 2015 Site observations. Pacific Environment Pty Ltd (2014), Western Coal Services Air Quality Management Plan, 30 July 2014, Ref: 08866. Annual Daily 24-hr Summaries for teom.xlsx - 1 January to 31 December 2015. WCS Community Complaints Register (April 2014 to December 2015). 	 Potential sources of significant dust emissions from the Site include: Unsealed/uncovered areas exposed to wind erosion including emplacement areas and stockpiles; Coal handling and dozer activities; Movement of vehicles on sealed and unsealed roads from general site activities, and Crushing, screening and preparation of product coal. To minimise dust emissions, the following measures were observed on-site, consistent with those noted in the Air Quality Management Plan: Fixed sprinklers on the stockpile. Enclosure of conveyor transfer points. Coal reclaim from stockpiles via underground reclaim tunnel. Three quarter enclosed conveyors. Haul roads located off-site, although not in use at the time of the site inspection, were sealed. Internal roads with the WCS were not sealed at the time of the site inspection. It is also noted that the site inspection was conducted on one wet day (4 February 2016) and one dry day (5 February 2016), hence the site was not observed in very dry conditions. Other site observations included: Three deposition dust gauges (DG3, DG4 and DG5) are located at WCS. One High Volume Air Sampler (measuring both PM₁₀ and Total Suspended Particulates) located at Pine Dale Mine. One Tapered Element Oscillating Microbalance (TEOM) located in the vicinity of Blackmans Flat. The 12 month rolling average dust deposition was above the guideline at location DG3 for four months in 2014 and five months in 2015. The rolling average was above the guideline at location DG3 for four months in 2015. It is noted that no dust complaints were received between April 2014 and December 2015. Use position dust samples for February 2016 were not available. It is acknowledged that some elevated results are potentially overstated for DG3 due to other (non-coal dust related) sources, such as bugs, plant matter, dirt and debris from a former unsealed road. DG3 is located appro	Compliant			
ML-1448- 18	Management and Rehabilitation Of Lands (General) The lease holder shall not interfere in any way with any fences on or adjacent to the subject area unless with the prior written approval of the owner thereof or the Minister and subject to such conditions as the Minister may stipulate.	Site observations	The WCS overland conveyor is located on a number of leases with access provided via public and private roads. WCS management reported that there are no fences outside of the surface operations under their control and there was no observed damage to fences or gates in the lease areas during the site inspection. New gates were observed at the access points to Kerosene Vale.	Compliant			
ML-1448- 19	The lease holder shall observe any instruction given or which may be given by the Minister with a view to minimising or preventing public inconvenience or damage to public or private property.	-	WCS management reported that they were not issued any instruction by the Minister with a view to minimising or preventing public inconvenience or damage to public or private property during the audit period.	Not Activated			

Mining Lea	Aining Lease 1448					
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation		
ML-1448- 20	If required to do so by the Minister and within such time as may be stipulated by the Minister the lease holder shall carry out the satisfaction of the Minister surveys of structures, buildings and pipelines on adjacent landholdings to determine the effect of operations on any such structures, buildings and pipelines.	-	WCS management reported that they were not required to survey of structures, buildings and pipelines on adjacent landholdings to determine the effect of operations on any such structures, buildings and pipelines during the audit period.	Not Activated		
ML-1448- 21	If so directed by the Minister the lease holder shall rehabilitate to the satisfaction of the Minister any lands within the subject area which may have been disturbed by the lease holder.	-	Refer to CCL-733, Condition 7.	Compliant		
ML-1448- 22	Upon completion of operations on the surface of the subject area or upon the expiry or sooner determination of this authority or any renewal thereof, the lease holder shall remove from such surface such buildings, machinery, plant, equipment, constructions and works as may be directed by the Minister and such surface shall be rehabilitated and left in a clean, tidy and safe condition to the satisfaction of the Minister.	-	This Condition was not activated during the audit period.	Not Activated		
ML-1448- 23	If so directed by the Minister the lease holder shall rehabilitate to the satisfaction of the Minster and within such time as may be allowed by the Minister any lands within the subject are which may have been disturbed by mining or prospecting operations whether such operations were or were not carried out by the lease holder.	-	Refer to CCL-733, Condition 7.	Compliant		
ML-1448- 24	The lease holder shall take all precautions against causing outbreak of fire on the subject area.	-	WCS management reported that there were no fires during the audit period and no evidence of fire(s) was observed by the auditors during the site inspection. MCW Environmental are not fire experts and did not assess if all precautions to minimise fire were undertaken.	Not Activated		
ML-1448- 25	The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent contamination, pollution, erosion or siltation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse or catchment area or any undue interference to fish or their environment and shall observe any instruction given or which may be given by the minister with a view to preventing or minimising the contamination, pollution, erosion or siltation of any river, stream, creek, tributary, lake, dam, reservoir, watercourse or catchment area or any undue interference to fish or their environment.	 AECOM (2014), Targeted Phase 2 Environmental Site Assessment, 22 October 2014, Ref: 60326953. Email – Centennial (2015), Phase 2 Environmental Site Assessment at Western Coal Services [Sent: 02/06/2015 @ 3:58pm] to EPA. ALS Website (2015) Lidsdale Mine LDP004, Available at: https://portal.alsglobal.com/we b.htm [Accessed 27/01/2016 at 14:25hrs] Centennial Environmental Monitoring Monthly Reports – April to December 2014. Centennial Environmental Monitoring Monthly Reports – January to November 2015. LDP-006 Data Summary.Xls – 08/01/2015 to 03/12/2015. Centennial (2015), Mining Operations Plan Western Coal Services November 2015 to October 2022. 	 A Targeted Phase 2 Environmental Site Assessment (ESA) was conducted at the site between June and August 2014 (AECOM, 2014) i.e. within four months of April 2014.). AECOM (2014, p.III) identified that "Based on the field observations an d review of analytical data, no gross contamination was identified that would preclude the proposed development without first initiating remedial activities". The following recommendations were made in the Phase 2 ESA: <i>"Continue monthly surface water monitoring at the Site.</i> <i>Further investigation of heavy metal contamination of sediments in Wangcol Creek, with particular regard to assessing sediment quality far up stream and far down stream of the Site.</i> <i>Improve housekeeping practices to minimise spills in and around the oil store</i>" (AECOM, 2014, p.III). Surface water monitoring is conducted at the site and improvements to the oil store were observed during the site inspection. 	Compliant		

Mining Lea	Mining Lease 1448					
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation		
ML-1448- 26	 Blasting The lease holder shall monitor noise and vibration and institute controls. generally in accordance with the recommendations of Australian Standard AS-2187-1993 and ANZEC Guidelines. a) Ground Vibration The lease holder shall design all blasts on the basis that the ground vibration peak particle velocity generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by the lease holder, the holder of an authority under the Mining Act, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting. b) Blast Overpressure The lease holder shall design all blasts on the basis that the blast overpressure noise level generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by the lease holder, the holder of an authority under the Mining Act, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by the lease holder, the holder of an authority under the Mining Act, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting. 	-	SSCS management reported that no blasting is conducted at WCS. WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reject and tailings emplacement facility comprising a coal distribution network.	Not Activated		
ML-1448- 27	Trees (Planting And Protection of) Flora And Fauna and Arboreal Screens If so directed by the Minister, the lease holder shall ensure that operations are carried out in such manner so as to minimise disturbance to flora and fauna within the subject area.	 RPS Australia (2015), Tree Clearance Supervision For Tailings Dam Expansion, Western Coal Services, 12 October 2015, Ref; 127341:DW:AB. NewEra (2015-A) Follow Up Report Coal Services Revegetation Works, 15 November 2015. NewEra (2015-B) Follow Up Report Coal Services Revegetation Works, 15 November 2015. 	Trees were removed from the adjoining ML 1448 during the audit period. Clearing on ML 1448 was reported to have been conducted in accordance with existing approvals. A report from RPS dated 12 October 2015 was available detailing the supervision of tree clearance for the tailings dam expansion. The report noted that " <i>An RPS ecologist visited the site on the 1st - 2nd and 12th of June 2015 and the 12th - 13th August 2015 and inspected trees requiring removal and marked those with habitat attributes (e.g. hollows, nests etc.). An RPS ecologist was present at the site to oversee tree clearance on the 9th-12th of June 2015, the 18th -19th and 26th of August 2015 and the 30th of September 2015. A total of 221 trees (with 356 small, 159 medium and 28 large hollows) identified as potential habitat trees were felled. Of the felled trees only four were occupied by fauna (all individuals were relocated across from the site in nearby state forest. The other two self relocated in nearby vegetation to the south. Felled trees were left overnight prior to stockpiling" (RPS, 2015, p.4). RPS (2015, p.4) reported that "A the end of felling operations no animals were injured during the works and where individuals were detected, they were relocated to nearby vegetation. The wombat burrow present in the disturbance footprint was successfully excavated and the absence of the wombat was confirmed".</i>	Compliant		
ML-1448- 28	Notwithstanding the provisions of Condition No 36 e (i) the lease holder shall not fell trees. ' strip bark or cut timber on any land within the subject area except with the approval of the owner/occupier and subject to the payment to the owner of the trees. bark or timber or compensation as agreed or as assessed by the Warden.	-	Refer to ML 1448, Condition 27.	Compliant		
ML-1448- 29	The lease holder shall maintain an arboreal screen to the satisfaction of the Minister within such parts of the subject area as may be specified by the Minister and shall plant such trees or shrubs as may be required by the Minister to preserve the arboreal screen in a condition satisfactory to the Minister.	Site observations	WCS management reported that they had not received instruction from the Minister to plant trees or shrubs. It is noted that main infrastructure such as the CHPP, office, conveyors and stockpiles are located approximately 800 m from Castlereagh Highway behind landforms and rehabilitated areas, such as the Rehabilitation Initiative Area. The CHPP and main conveyor are built in neutral colours, to help nullify any glare from lighting and blend with the surrounding landscape.	Compliant		

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Mining Lea	se 1448			
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation
ML-1448- 30	Soil Erosion The lease holder shall conduct operations in such a manner as not to cause or aggravate soil erosion and the lease holder shall observe and perform any instructions given or which may be given by the Minister with a view to minimising or preventing soil erosion.	Site observations	Sediment and erosion controls were observed during the site inspection in the form of rock dams and straw bales, for example at LDP-006, in the vicinity of the overland conveyor and along internal roads at the CHPP.	Compliant
ML-1448- 31	Roads The lease holder shall pay to the Council of the City of Lithgow, Department of Land and Water Conservation or the Chief Executive, Roads and Traffic Authority the cost incurred by such Council or Department or Chief Executive of making good any damage caused by operations carried on by or under the authority of the lease holder to any road adjoining or traversing the surface or the excepted surface, as the case may be of the subject area. PROVIDED HOWEVER that the amount to be paid by the lease holder as aforesaid shall be reduced by such sum of money if any as may be paid to the said Council the Department of Conservation and Land Management or the Chief Executive, Roads and Traffic Authority as the case may be from the Mine Subsidence Compensation Fund constituted under the Mine Subsidence Compensation Act, 1961, in settlement of a claim for compensation for the same damage.	 Site observations Central West Line Marking Quotation, 7 August 2014. Barnson Pty Ltd Invoice, 30 November 2014. 	Line markings were observed at the intersection of the Castlereagh Highway and the WCS Access Road during the site inspection. Evidence this was completed to the satisfaction of the RMS was not available for review; however, this condition is considered compliant given the requirement was achieved within six months of approval.	Compliant
ML-1448- 32	In the event of operations being conducted on the surface of any road, track or firetrail traversing the subject area or in the event of such operations causing damage to or interference with any such road, track or firetrail the lease holder, at his own expense, shall if directed to do so by the Minister provide to the satisfaction of the Minister an alternate road, track or firetrail in a position as required by the Minister and shall allow free and uninterrupted access along such alternate road, track or firetrail and, if required to do so by the Minister, the lease holder shall upon completion of operations rehabilitate the surface of the original road, track or firetrail to a condition satisfactory to the Minister.	 Site observations Branson Pty Ltd (2014), Road Dilapidation Report - Western Coal Services, - Private Haul Roads, Blackmans Flat, Ref: 21518-T01_B, July 2014. Centennial (2015), WCS – Annual Review 2014, 23 April 2015. 	 The Link Haul Road overbridge and link haul roads had not been constructed at the time of the site inspection. A Road Dilapidation Report - Western Coal Services, - Private Haul Roads (Branson, 2014) was prepared within three months of the date of consent. The report represents the initial inspection of haul roads: Haul Road #1 – Angus Place Colliery to Mt Piper Power Station (6.90km); and Haul Road #2 –Wallerawang Power Station to Angus Place Colliery (5.40km). Section 6 of the report (Branson, 2014 pp.36-39) provided recommendations at various distances (chainage) of the haul roads. Branson's (2014, p.40) stated that "<i>The recommendations made in section 6.0 of this report should be completed within six (6) months of this report being issued</i>". A letter from WCS to DP&E dated 23 April 2015 noted that due to Angus Place Colliery being placed in care and maintenance, the last coal truck to use the Wallerawang and Mt Piper haul roads was on 6 March 2015. 	Not Activated
ML-1448- 33	 Catchment Areas Operations shall be carried out in such a way as not to cause any pollution of the Coxs River Catchment Area. a) If the lease holder is using or about to use any process which in the opinion of the Minister is likely to cause contamination of the waters of the said Catchment Area the lease holder shall refrain from using or cease using as the case may require b) such process within twenty four (24) hours of the receipt by the lease holder of a notice in writing under the hand of the Minister requiring the lease holder to do so. The lease holder shall comply with any regulations now in force or hereafter to be in force for the protection from pollution of the said Catchment Area. 	-	Refer to CCL733, Condition 32.	Compliant

Mining Lea	ise 1448		
Conditio n No.	Condition	ition Evidence Source Con	
ML-1448- 37	 Trig. Stations and Survey Marks a) The marks in connection with any Irigonometrical station, Permanent Mark or State Survey Mark (under the Survey Co-ordination Act, 1949) erected on or near the subject area shall not be interfered with and the unrestricted right of access to such station by authorised persons and also the right to clear sight lines to surrounding stations is reserved at all times. b) The lease holder shall take all necessary precautions to preserve the trigonometrical station, Permanent Mark or State Survey Mark (under the Survey Co-ordination Act, 1949) and the cairn, mast and vanes which might be erected upon the subject area. c) No buildings or other structures shall be erected which would make observations to and from surrounding trigonometrical stations difficult to effect. d) In the event of operations interfering with or damaging any trigonometrical station, Permanent Mark or State Mark (under the Survey Co-ordination Act, 1949) erected on or near the subject area, or if required to do so by the Minister, the lease holder shall relocate any such trigonometrical station, Permanent Mark or State Survey Mark (under the Survey Co-ordination Act, 1949) to the satisfaction of, and in a position required by, the Department of Land and Water Conservation, the Land Information Centre, Bathurst and the Minister and, if required to do so by the Minister, and subject to such conditions as the Minister may impose, the lease holder, upon completion of operations shall relocate any such trigonometrical station, Permanent Mark or State Survey Mark (under the Survey Co-ordination Act, 1949) to it's original position. 	-	The auditors considered this Condition not to be an environmental issue con 1448. The Condition was therefore not audited.
ML-1448- 41	Transmission Lines, Communication Lines and Pipelines The lease holder shall as far as is practicable so conduct operations as not to interfere with or impair the stability or efficiency of any transmission line, communication line or pipeline traversing the surface or the excepted surface of the subject area and shall comply with any direction given or which may be given by the Minister in this regard.	-	Refer to CCL-733, Condition 19
ML-1448- 43	Aboriginal Place or Relic The lease holder shall not knowingly destroy, deface or damage any aboriginal place or relic within the subject area except in accordance with an authority issued under !he National Parks and Wildlife Act, 1974, and shall take every precaution in drilling, excavating or disturbing the land against any such destruction, defacement or damage.	 RPS (2014), Centennial's Western Holdings Aboriginal Cultural heritage Management Plan, 2014, Ref: PR121000; Final September 2014. Letter – DP&E (2014), Western Region Aboriginal Cultural Heritage Management Plan, 23 October 2014. 	The Centennial Aboriginal Cultural Heritage Management Plan (ACHMP) (R prepared to provide Centennial with a consistent approach to consultation w Aboriginal communities about Aboriginal cultural heritage identification as w consistent minimum standards and processes for Aboriginal cultural heritage monitoring and management across Centennial's western operations. The the following regional Centennial sites: Airly Mine; Angus Place Colliery; Cla Lidsdale Siding; Springvale Mine and WCS. The ACHMP outlines protocols consultation, handling sensitive cultural information, roles and responsibilities control and dispute resolution. The ACHMP was approved by the Director-General on 23 October 2014. WCS management reported that no Aboriginal sites were impacted during the One Aboriginal site located behind 'A' Pit was observed to be fenced during inspection.

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Mining Lea	lining Lease 1448							
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation				
ML-1448- 44	 Labour/ Expenditure The lease holder shall during each year of the term of the authority: a) ensure that at least 4 workers are efficiently employed on the subject area or b) expend on operations carried out in the course of prospecting or mining the subject area, an amount of not less than \$70,000.00. The Minister may, at any time after a period of two (2) years from the date on which this authority has effect or from the date on which the renewal of this authority has effect, increase or decrease the amount of expenditure of labour required. 	 Site observations. RPS (2013), Environmental Impact Statement Western Coal Services Project, July 2103, Ref: PR110910; Final / July 2013. 	WCS employs up to 22 people and can operate 24 hours per day, 7 days a week. The EIS for the development (RPS, 2013, p.20) noted the site employed 15 full time employees. At the time of the site inspection WCS employed 17 workers. Construction costs for the new REA were not made available to MCW Environmental; however, the EIS (RPS, 2013, p.75) notes that the capital investment for the Project was in excess of \$30 million, noting the new CHPP and haul link roads had not been constructed at the time of the site inspection.	Compliant				
ML-1448- 45	 Additional Information The lease holder shall if directed by the Minister and within such time as the Minister may stipulate furnish to the Minister: a) information regarding the ownership of the land within the subject area; b) information regarding the ownership of the coal within the subject area prior to 1sl January, 1982; c) an indemnity in a form approved by the Minister indemnifying the Crown and the Minister against any wrong payment effected as a result of incorrect information furnished by the lease holder; d) information regarding the financial viability of the lease holder and operations within and associated with the subject area; and e) information regarding shareholdings in the lease holder. 	-	The auditors considered this Condition not to be an environmental issue concerning the ML 1448. The Condition was therefore not audited.	Noted				
ML-1448- 47	 Inspectors a) Where an Inspector under the Mining Act 1992 is of the opinion that any condition of this authority relating to operations within the subject area, or any provision of the Mining Act, 1992, relating to operations within the subject area, are not being complied with by the lease holder, the Inspector may serve on the lease holder a notice stating that and give particulars of the reason why, and may in such notice direct the lease holder. i. to cease operations within the subject area in contravention of that condition or Act; and ii. to carry out within the specified time works necessary to rectify or remedy the situation. b) The lease holder shall comply with the directions contained in any notice served pursuant to sub paragraph (a) of this condition. The Director General may confirm, vary or revoke any such direction. c) A notice referred to in his condition may be served on the Colliery Manager. 	-	Refer to CCL-733, Condition 10	Not Activated				
ML-1448- 48	Indemnities The lease holder shall indemnify and keep indemnified the Crown from and against all actions suits and claims and demands of whatsoever nature and all costs charges and expense which may be brought against the lease holder or which the lease holder may incur respect of any accident or injury to any person or property which may arise out of the construction maintenance or working of any workings now existing or to be made by the lease holder within the boundaries of the subject area or in connection with any of the operations notwithstanding that all other conditions of this authority shall in all respects have been observed by the lease holder or that any such accident or injury shall arise from any act or thing which the lease which the lease holder may be licensed or compelled to do hereunder.	-	WCS management reported that there have been no claims, actions, suits or demands brought against the lease holder and as such this requirement has not been triggered.	Not Activated				

Mining Lea	ase 1448		
Conditio n No.	Condition	Evidence Source	Comment / Finding
ML-1448- 49	The lease holder shall save harmless the Crown from payment of compensation and from and against all claims, actions, suits or demands whatsoever in the event of any damage resulting from mining operations under or near the subject area.	-	Noted
ML-1448- 50	 Prospecting (General) a) Where the lease holder desires to commence prospecting operations in the subject area the lease holder shall notify the Director General in writing and shall comply with such additional conditions as the Minister may impose including any condition requiring the lodgement of an additional bond of other form of security or rehabilitation of the area affected by such operations. b) Where the lease holder notifies the Director General pursuant to sub paragraph (a) of this condition the lease holder shall furnish with that notification details of the type of prospecting methods that would be adopted and the extent and location of the area that would be affected by them. 	-	WCS management reported that there have been no prospecting activities of period and as such this requirement has not been triggered.
ML-1448- 51	 Security Deposit a) The lease holder shall, upon request by the Director General, lodge with the Minister the sum of \$10,000.00 in accordance with Instructions for Manner of Lodgement of Security Deposits as security for the fulfilment of the obligations of the lease holder under this authority. In the event that the lease holder fails to fulfil any of the lease holder's obligations under this authority the said sum may be applied at the discretion of the Minister towards the cost of fulfilling such obligations. For the purposes of the clause a lease holder shall be deemed to have failed to fulfil the lease holder's obligations under this authority, if the lease holder fails to comply with any condition or provision of the authority, ay provision of the Act or regulations made thereunder or any condition or direction imposed or given pursuant to a condition or provision of this authority or of any provision of the Act or regulations made thereof, vary the amount of security required in accordance with this condition. c) Where the amount of security has been increased pursuant to Clause (b) hereof the lease holder shall, within two (2) months of being requested by the Minister, lodge a security for the amount of security required, in which case the Minister shall refund or release to the lease holder the security previously lodged. 	 Letter – Centennial (2014), Springvale Colliery, Lamberts Gully & Western Main Colliery Amended Joint Security, 24 October 2014. Deed of Security Bond – Bank Guarantee No DG373553418, 23 October 2014 for \$6,384,000. 	WCS provided a copy of a letter to DRE dated 24 October 2014 that include Security Deposit Bond for the amount of \$6,384,000. The letter noted that the Security Deposit Bond together increased the joint security to \$12,768,000. The Deed of Security Deposit Bond covered leases CCL 733, ML 1448, ML 314.
ML-1448- 54	Royalty At Additional Rate The lease holder shall during the term of this authority pay to the Minister royalty at the additional rate as prescribed by the Regulations for coal recovered by open cut mining methods from the area.	-	WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reje emplacement facility comprising a coal distribution network.

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Mining Lea	ase 1448	3		
Conditio n No.	Condi	tion	Evidence Source	Comment / Finding
ML-1448- 56	a)	The lease holder shall carry out operations in such a way as to conform strictly to all provisions of the Water Board (Corporatisation) Act, 1994, as amended, and the regulations thereunder applying to the prevention of pollution of the Warragamba Outer Catchment Area or the preservation of the purity of the water supply provided thereby or derived therefrom or for the protection of the property of Sydney Water Corporation Limited (A.C.N. 063 279 649) [hereinafter referred to as the 'the Corporation'] on the Outer Catchment Area and also to all requirements of the Corporation from time to time under the said Act or any of the regulations for the time being in force.	-	Refer to CCL-733, Condition 32
	b)	If the lease holder shall at any time be using or about to use any process which in the opinion of the Corporation is likely to pollute the Outer Catchment Area or the water supply or to endanger any property of the said Corporation on the Outer Catchment Area the lease holder upon service of a notice in writing under the hand of the Minister to do so shall: i. discontinue the use of such process within twenty four (24) hours, or ii. (thereafter refrain from adopting such process at any time, as the casemay require.		
	c)	The lease holder shall provide and maintain to the satisfaction of the Minister efficient means to prevent the contamination, pollution, erosion or siltation of any stream or watercourse or Outer Catchment Area and shall observe any instruction given or which may be given by the Minister with a view to preventing or minimising the contamination, pollution or siltation of any stream watercourse or Outer Catchment Area.		
	d)	The lease holder hereby covenants with Us Ours Heirs and Successors and as a separate covenant the lease holder hereby covenants with the Corporation and its Successors that the lease holder shall at all times hereafter save harmless and keep Us and the said Corporation and Our Heirs and Successors and the Successors of the said Corporation indemnified from payment of compensation and from and against all actions proceedings claims and demands in respect of any injury loss of damage arising out of or in any way connected with any interference with or deprivation or loss of access to the land and premises of this authority which may occur by reason of any works or operations undertaken or carried out by the said Corporation or arising out of or in any way connected with any discontinuance or alteration of any process consequent upon the service of a notice in pursuance of the provisions of Condition [56(b)] or arising out of or in any way connected with the operation of any regulations relating to Outer Catchment Area in force at the date hereof or made by the said Corporation at any time hereafter and the lease holder hereby agrees that for the purpose of this condition the said Corporation shall be deemed to be a party to this authority.		

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Mining Leas	ining Lease 1448							
Conditio n No.	Conditio	on	Evidence Source	Comment / Finding				
ML-1448-	The leas	e holder shall:	-	Refer to CCL 733, Condition 32				
57	a) b) c) d) e) f) g) h)	Make such provisions for sanitation as may be directed by the Corporation and shall at all times observe and perform any requirements of the said Corporation respecting sanitation. not establish any camps or habitations within any area under the control of the Corporation unless with the consent of the Corporation. Not sink any drillhole within any watercourse on the Warragamba Outer Catchment Area unless with the consent of the Corporation. Not interfere with or impede the use of the Corporation tracks of endanger their stability in any way by reason of the operations. Not construct any road to the sites of any drillholes unless with the consent of the Corporation to the proposed route and type of road construction. Not interfere in any way with any fences on or adjacent to the Warragamba Outer Catchment Area unless with the consent in writing of the owner thereof or the Corporation. Give three (3) days notice to the Corporation's Resident Engineer, Pipe Head, Guildford of the lease holder's intention to commence drilling operations. Not cut or remove any timber except such as directly obstructs or prevents the carrying on of operations and the lease holder shall obtain the consent 1n wnt1ng. of the Corporation before making use of the timber so cut for other than 1n connection with operations.						

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Mining Lea	ase 1448			
Conditio n No.	Condition		Evidence Source	Comment / Finding
	Extraction Plan Condit	tion	-	WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reje
	(a) In this c	condition:		emplacement facility comprising a coal distribution network.
	(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; and		
		II. approved by the Secretary.		
	(ii)	relevant development consent means a development consent or project approval issued under the <i>Environmental Planning</i> & Assessment Act 1979 relating to the mining operations subject to this lease.		
	(b) The lea operati with an	ase holder must not undertake any underground mining ons that may cause subsidence except in accordance approved Extraction Plan.		
	(c) The lea provide any sul under t	ase holder must ensure that the approved Extraction Plan as for the effective management of risks associated with bsidence resulting from mining operations carried out his lease.		
	(d) The lea	ase 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.		

	Compliance Status & Recommendation
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Mining Lea	Mining Lease 314						
Conditio n No.	Condition	Evidence Source	Comment / Finding				Compliance Status & Recommendation
ML-314- 01	 Notice to Landholders a) 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 	 Letter – Centennial (2014-A), Notification to Landholder of Renewal of ML 204, 30 May 2014. Letter – Centennial (2014-B), Notification to Landholder of Renewal of ML 1319, 5 June 2014. Letter – Centennial (2014-C), Notification to Landholder of Renewal of ML 314, 23 September 2014. Letter – Centennial (2014-D), Notification to Landholder of Renewal of ML 1352, 1 December 2014. 	Letters from Centennial to landholders including, Crown Lands Division, RMS, Energy Australia, Forests NSW, local resident(s), Transport for NSW informing of the renewal of the lease were available for review for leases ML 1352 and ML 314 that were renewed during the audit period. WCS was found to be compliant with this condition as evidence of notification to landholders was provided and the intent to notify landholders was evident.				Compliant
	and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.		Lease	Date Granted	Renewal Date	Expiry Date	
	b) 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		Consolidated Coal Lease 733	23 May 1990	23 December 2008	3 July 2027	
	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.		Mining Lease 1352	26 May 1994	2 March 2015	22 June 2036	
			Mining Lease 1448	31 May 1999	-	-	
			Mining Lease 314	3 August 1993	16 June 2014	3 August 2035	
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ML-314-	Rehabilitation	-	Refer to CCL-733, Condition	7.			Compliant
02	Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.						

Mining Lea	se 314			
Conditio n No.	Condit	tion	Evidence Source	Comment / Finding
ML-314-	Mining	Operations Plan and Annual Rehabilitation Report	-	Refer to CCL-733, Condition 3.
ML-314- 03	Mining a) b) c) d) e)	 g Operations Plan and Annual Rehabilitation Report 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. The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: ii. identifies areas that will be disturbed; iv. details the staging of specific mining operations, mining purposes and prospecting; i. identifies how the mine will be managed and rehabilitated to achieve the post mining land use; ii. identifies how the mine will be managed and rehabilitated to achieve the post mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and vii. reflects the conditions of approval under: the Protection of the Environment Operations Act 1979; the Protection of the Environment Operations Act 1997, and any other approvals relevant to the development including the conditions of this mining lease. The MOP must be prepared in accordance with the ESG3. Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at www.resources.nsw.gov.au/environment The lease holder may apply to the Minister to amend an approved MOP at any time. It is not a breach of this condition if: the operations Act 1979, the Protection of the Environmental Planning and Assessment Act 1979, the Protection of the Environmental Planning and Assessment Act 1979, the Mine Health and Safety Act 2002 and Mine Health and Safety Act 2004 I Coal Mine Health and Safety Act 2002 and Mine Health and Safety Act 2001; and<		Refer to CCL-733, Condition 3.
		 the approved MOP; iv. be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and v. be prepared in accordance with any relevant annual reporting guidelines published on the Department's website 		
	No	at www.resources.nsw.gov.au/environment. te: Tile Rehabilitation Report replaces the Annual Environmental		
	Ma	nagement Report		

Compliance Status & Recommendation

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Mining Lea	ase 314		
Conditio n No.	Condition	Evidence Source	Comment / Finding
ML-314- 04	 4. Compliance Report a) 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. b) 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; i: any action taken, or to be taken, to prevent any recurrence, or to mitigate the effects, of that non-compliance. c) The Compliance Report must be lodged with the Department annually on the grant anniversary date for the life of this mining lease. d) In addition to annual lodgement under condition to renew this mining lease under the Act; ii. must accompany any application to ransfer this mining lease under the Act; and iii. must accompany any application to cancel, or to partially cancel, this mining lease under the Act; and iii. must accompany any application to cancel, or of da bove, the titleholder must lodge a 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. A Compliance Report must be submitsed on emoth prior to the expiry of this mining lease, where the licence holder is not seeking to renew or cancel this mining lease. 	 Centennial (2015-A), WCS – Annual Review 2014, 23 April 2015. Letter – Centennial (2015-B), WCS - Annual Review, 23 April 2015. Letter – Centennial (2015-C), WCS Annual Environmental Management Report, 27 February 2015. Letter – DP&E (2015), WCS – Annual Review 2014, 20 March 2015. 	 The Annual Review was submitted to DP&E on 27 February 2015 (Centennia DP&E responded to WCS on 20 March 2015 requesting further information f concerning: Condition 17, Schedule 3 – Prepare and Implement a revised Air Quality Plan. Condition 4, Schedule 2 - Resubmit compliance performance information of the Annual Review. Condition 8, Schedule 3 – Implement best practice to minimise construct and road noise. Provide detailed plan of noise mitigation measures. Condition 3, Schedule 4 - Demonstrate compliance with notifying poter Centennial responded to DP&E in a letter dated 23 April 2015 (Centennial, 2 management plans where requested had been updated and were attached to Centennial noise monitoring and engagement with landowners if attenuation required at properties citing the installation of double glazing at residential lot. The 2014 Annual Review included descriptions of the developments durperiod (Section 2). The 2014 Annual Review included monitoring results for the calendar yea a comparison against statutory requirements were provided in Section 3 ana Non-compliances were addressed in Section 3.22 of the Annual Review details concerning the actions that were (or are being taken) to ensure ob) Section 3 included trends in the monitoring data for the review period. No discrepancies were noted in the 2014 Annual Review for the reportind dM Measures that will be implemented in the next reporting period were incl of the Annual Review. These included, but were not limited to: <i>"Continue investigation into water management system</i>; <i>Continue investigation into water management system</i>; <i>Continue investigation into water management system</i>; <i>Rehabilitation monitoring will continue in 2015 utilising the EFA mon methodology;</i> <i>Rehabilitation monitoring will continue in 2015 utilising the EFA mon methodology;</i> <i>Rehabilitation monitoring will continue in 2015 utilising the EFA mon methodology</i>

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Mining Lea	Mining Lease 314				
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
ML-314- 05	 Environmental Incident Report a) The lease holder must notify the Department of all: iv. breaches of the conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and v. breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the Protection of the Environment Administration Act 1991), 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. Note. Refer to www.resources.nsw gov.au/environment for notification contact details. b) 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 mining operations, mining purposes and prospecting operations under this mining lease. 		WCS management reported that there have not been any incidents that have: g) Caused or threatened to cause actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial harm to the environment; and/or h) Breached or exceeded the limits or performance measures/criteria in this consent. Therefore no incident report has been provided to the Director-General and any other relevant agencies. The auditors sighted screenshots of the ECD Lotus Notes database that provided a summary of Centennial Coal defined Level 1-5 incidents for the audit period (Refer to Section 5.2 of the Report for further details).	Not Activated	
	 Note. The lease /holder should have regard to any relevant Director General's guidelines in tile preparation of an Environmental Incident Report. Refer to www.resources.nsw gov.au for further details. c) 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 Protection of the Environment Operations Act 1997 arising in connection with significant surface disturbing activities including mining operations, mining purposes and prospecting operations, under this mining lease. 				

Mining Lea	ase 314		
Conditio n No.	Condition	Evidence Source	Comment / Finding
ML-314- 06	 Subsidence Management The lease holder must not commence or undertake underground mining operations that may cause subsidence of the surface other than in accordance with an Eligible Subsidence Management Plan approved by the Director-General. For the purposes of this condition, an 'Eligible Subsidence Management Plan' means: A Subsidence Management Plan prepared in accordance with current government guidelines for the preparation of Subsidence Management Plans; or Those parts of an Extraction Plan or another type of plan prepared, either in whole or in part, with reference to current government guidelines for the preparation of a Subsidence Management Plan; and approved for the purposes of the Environmental Planning am Assessment Act 1979 (or any planning legislation which replaces that Act) by the Minister or Director-General of the Department of Planning & Infrastructure, or another officer of that Department authorised to approve such a plan, 	-	WCS is a Run-of-Mine (ROM) coal handling and processing plant and a re emplacement facility comprising a coal distribution network.
ML-314- 07	Resource Recovery The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	-	WCS is a Run-of-Mine (ROM) coal handling and processing plant and a re emplacement facility comprising a coal distribution network.

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Mining Lea	ase 314		
Conditio n No.	Condition	Evidence Source	Comment / Finding
ML-314- 08	Security Group Security 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 as a group security has been assessed by the Minister at \$6,750,000. The leases covered by the group security include: Mining Lease 204 (Act 1906) Mining Lease 564 (Act 1906) Private Lands Lease 133 (Act 1906) Consolidated Coal Lease 733 (Act 1973) Coal Lease 361 (Act 1973) Coal Lease 377 (Act 1973) Coal Lease 394 (Act 1973) Mining Purposes Lease 314 (Act 1973) Mining Lease 1303 (Act 1992) Mining Lease 1319 (Act 1992) Mining Lease 1326 (Act 1992) Mining Lease 1326 (Act 1992) Mining Lease 1352 (Act 1992) Mining Lease 1357 (Act 1992) Mining Lease 1537 (Act 1992) Mining Lease 1537 (Act 1992) Mining Lease 1537 (Act 1992) Mining Lease 1537 (Act 1992) Mining Lease 1538 (Act 1992) Mining Lease 1537 (Act 1992) Mining Lease 1537 (Act 1992) Mining Lease 1538 (Act 1992) Mining Lease 1548 (Act 1992)	 Security Certificate – Guarantee No DG75063418 for 3,375,000 – 28 September 2011 (Centennial). Security Certificate – Guarantee No DG76703418 for 3,375,000 – 3 October 2011 Springvale SK). Letter – DRE – Review of Single Security, 11 August 2011. 	Two Security Certificates (No. DG75063418 and No. DG76703418) each fo (\$6,750,000) from Springvale SK Kores Pty Ltd and Centennial Coal Comp available for review. The Deed of Security Deposit Bond covered leases ML 1448, ML 1352 and
ML-314- 09	Cooperation Agreement	Centennial (2015), Mining Operations Plan Western Coal	There are no overlapping petroleum titles; hence the requirement of Coope

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) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:

- access arrangements ٠
- operational interaction procedures ٠
- ٠ dispute resolution
- information exchange ٠
- well location ٠
- timing of drilling ٠
- potential resource extraction conflicts; and ٠
- rehabilitation issues. ٠

Operations Plan Western Coal Services November 2015 to October 2022.

eration Agreement has not been triggered.



nd MPL 314.

Not Activated

Mining Lea	Mining Lease 314				
Conditio n No.	Condition	Evidence Source	Comment / Finding	Compliance Status & Recommendation	
	Exploration Reporting	-	WCS management reported that there had been no exploration activities conducted at the site during the audit period. WCS is a Run-of-Mine (ROM) coal handling and processing plant and a reject and tailings emplacement facility comprising a coal distribution network.		
	Note: Exploration Reports (Geological and GeophysicaJI				
	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.	MCW Environmental consider that this condition not to have been activated during the aud period.			
	Reports must be prepared in accordance with Ex ploration Reporting: A guide for reporting on exploration and prospecting in New South Wales (Department of Trade and Investment; Regional Infrastructure and Services 2010).				
	SPECIAL CONDITIONS	Noted	Noted	Noted	
	Note: The standard conditions apply to all mining leases. The Division of Resources & Energy (DRE) reserves the right to impose special conditions, based on individual circumstances, where appropriate.				



Appendix B NSW DP&E Auditor Approval



 Planning Services

 Resource Assessments & Compliance

 Contact:
 Colin Phillips

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Mr Tony Nolan Environmental and Community Coordinator Centennial Coal Springvale PO Box 198 Wallerawang NSW 2845

Dear Mr Nolan

Western Coal Services (SSD 5579) Independent Environmental Audit – Approval of Qualified Team

I refer to your letter dated 8 October 2015, seeking the Secretary's approval for a suitably qualified team to conduct an independent environmental audit for Western Coal Services, in accordance with Condition 9 of Schedule 5 of the Development Consent.

The Secretary has approved the independent team consisting of:

- Michael Woolley, as lead auditor;
- Nick Ballard, as auditor; and
- Helen Onus, as auditor.

If you require any further information, please contact Colin Phillips, Team Leader, Resource Assessments, on the details above.

Yours sincerely

sont Reed

Howard Reed $q \cdot 10 - 15$ Director Resource Assessments As nominee of the Secretary