



Centennial Coal



Springvale Coal Pty Limited Springvale Colliery ANNUAL REVIEW

March 2016



Table 1. Annual Review Title Block

Name of Operation	Springvale Colliery
Name of Operator	Springvale Coal Pty Limited
Development Consent/ Project Approval #	SSD5594
Mining Lease #	ML1303, ML 1323, ML 1326, ML 1424, ML 1537, ML 1588, ML 1670, MLA 445, MLA 451, MLA 497, CL 377, MPL 314, EL 6974, AUTH 460
Name of Holder of Mining Lease	Centennial Springvale Pty Ltd and Springvale SK Kores Pty Ltd
Water License #	10WA118719 (WAL 36383) 10BL603519 (WAL 36383) 10BL602017 (WAL 36443) 10BL601863 (WAL 36446)
Name of Holder of Water License	Centennial Springvale Pty Ltd
MOP/RMP Start Date	November 2009
MOP/RMP End Date	November 2016
Annual Review Start Date	1 January 2015
Annual Review End Date	31 December 2015
<p>I, Mick Cairney , certify that this audit report is a true and accurate record of the compliance status of Springvale Colliery for the period 1/1/2015 to 31/12/2015 and that I am authorized to make this statement on behalf of Springvale Coal Pty Ltd</p> <p><i>Note:</i></p> <p>a) <i>The Annual Review is an 'environmental audit' for the purposes of s122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion) in an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p>b) <i>The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (intention to defraud by false or misleading statement – maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents –maximum penalty 2 years imprisonment or \$22,000,or both).</i></p>	
Name of Authorised Reporting Officer	Mick Cairney
Title of Authorised Reporting Officer	Executive General Manager Operations
Signature of Authorised Reporting Officer	
Date	24-3-16

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1. STATEMENT OF COMPLIANCE

Compliance Status presented into Table 2 considers DRE audit outcomes conducted Dec 2015 on CL377, ML1303, ML1323, ML1326, ML1537, ML1588, ML1670, A460 and EL6974.

Table 2. Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	
SSD 5594	No
EPBC 2011/5949	Yes
EPBC2013/6881	Yes
SMP LW 411-418 (04/1673)	Yes
ML 1303	Yes
ML 1323	No
ML 1326	Yes
ML 1424	Yes
ML 1537	Yes
ML 1588	Yes
ML 1670	Yes
CL 377	Yes
MPL 314	No
EL 6974	Yes
AUTH 460	Yes
EPL 3607	No
WAL 36383	Yes
WAL 36443	Yes
WAL 36446	Yes

Table 3. Non-Compliances

Relevant Approval	Condition #	Condition summary	Compliance Status	Comment	Page # addressed in Annual Review
SSD5594	2a	Generally in accordance with EIS-Manning Numbers	Non-Compliant	Employment exceeds a full time workforce of up to 310	Section 11
ML 1323	4	Compliance Report	Administrative Non-Compliance	Timing of submission	Section 11
MPL314	4	Compliance Report	Administrative Non-Compliance	Timing of submission	Section 11
EPL3607	L2.4	Water and Land Concentration limits	Non-complaint	Concentration limit exceeded	Section 11

Note: Compliance Status Key for Table 3

Risk Level	Colour Code	Description
High		Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium		Non-compliance with: <ul style="list-style-type: none"> • Potential for serious environmental consequences, but is unlikely to occur; or • Potential for moderate environmental consequences, but is likely to occur
Low		Non-compliance with: <ul style="list-style-type: none"> • Potential for moderate environmental consequences, but is unlikely to occur; or Potential for low environmental consequences, but is likely to occur
Administrative		Only to be applied where the non-compliance does not result in any risk of environmental harm (eg submitting a report to government later than required under approval conditions)

2. INTRODUCTION

Springvale Mine is an existing underground coal mine producing high quality thermal coal which is supplied to both domestic and international markets. It is located 15 kilometres to the northwest of the regional city of Lithgow and 120 kilometres west-northwest of Sydney in New South Wales (NSW). This is shown in Figure 1.

Underground coal mining commenced at Springvale Mine in 1995 following the granting of Springvale Mine's development consent (DA 11/92) on 27 July 1992, pursuant to Section 101 under Part 4 of the NSW Environmental Planning and Assessment Act, 1979 (EP&A Act). Springvale Coal Pty Limited is the operator of Springvale Mine.

On the 21st of September 2015 SSD 5594 was approved by the Department of Planning and Environment. The approval of SSD-5594 allows Springvale to continue underground coal mining operations within the Lithgow Seam at rates up to 4.5 Mtpa until 31 December 2028, with subsequent rehabilitation and closure works. In summary the project includes:

- continued longwall mining operations to extract up to 4.5 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal from the Lithgow Seam;
- continued operation of the mine's pit top area, support facilities and utilities;
- extension and continued use of the Springvale Delta Water Transfer Scheme, bore dewatering facilities and ventilation infrastructure;
- continued processing (sizing and screening) of ROM coal at the pit top area;
- continued stockpiling of ROM coal (85,000 tonnes (t) capacity);
- continued transportation of processed coal by overland conveyor to Centennial's Western Coal Services site (WCSS) for further processing or to the Mt Piper Power Station;
- continued transportation of processed coal by road haulage to other local domestic customers (limited to 50,000 tpa); and
- rehabilitation of the pit top area and Newnes Plateau surface infrastructure sites.

A summary of the development consent and mining lease boundary is shown in Figure 2 and 3.

The main components of Springvale Mine's operations are an underground longwall mine, accessed via the Springvale pit top, and supporting surface infrastructure within the pit top area and on Newnes Plateau within the Newnes State Forest. The Newnes Plateau infrastructure areas are accessed for light vehicles via State Mine Gully Road located in north Lithgow, and Old Bells Line of Road though Clarence for light and heavy vehicles Newnes Plateau and Pit Top disturbance Areas are shown in Figure 4 and 5 respectively.

In accordance with SSD5594 conditions of consent, the Western Projects Biodiversity Strategy will be updated by the end of January 2016. This offset strategy will be developed in accordance with the NSW Biodiversity Offset Policy for Major project (or its latest current version).

The contact details for Springvale personnel responsible for environment management and community relations, along with details for community complaints and enquiries have been provided in **Table 4**.

Table 4. Primary Contact Springvale Colliery

Contact	Position	Contact Details
Primary Contacts		
Jacques Le Roux	Mine Manager	T: (02) 6350 1613
		F: (02) 6355 1502
Natalie Gardiner	Environment and Community Co-ordinator	T: (02) 6350 1672
		F: (02) 6355 1502
Community Enquiries/Complaints		
Springvale Enquiries and Community Complaints		T: (02) 6350 1640

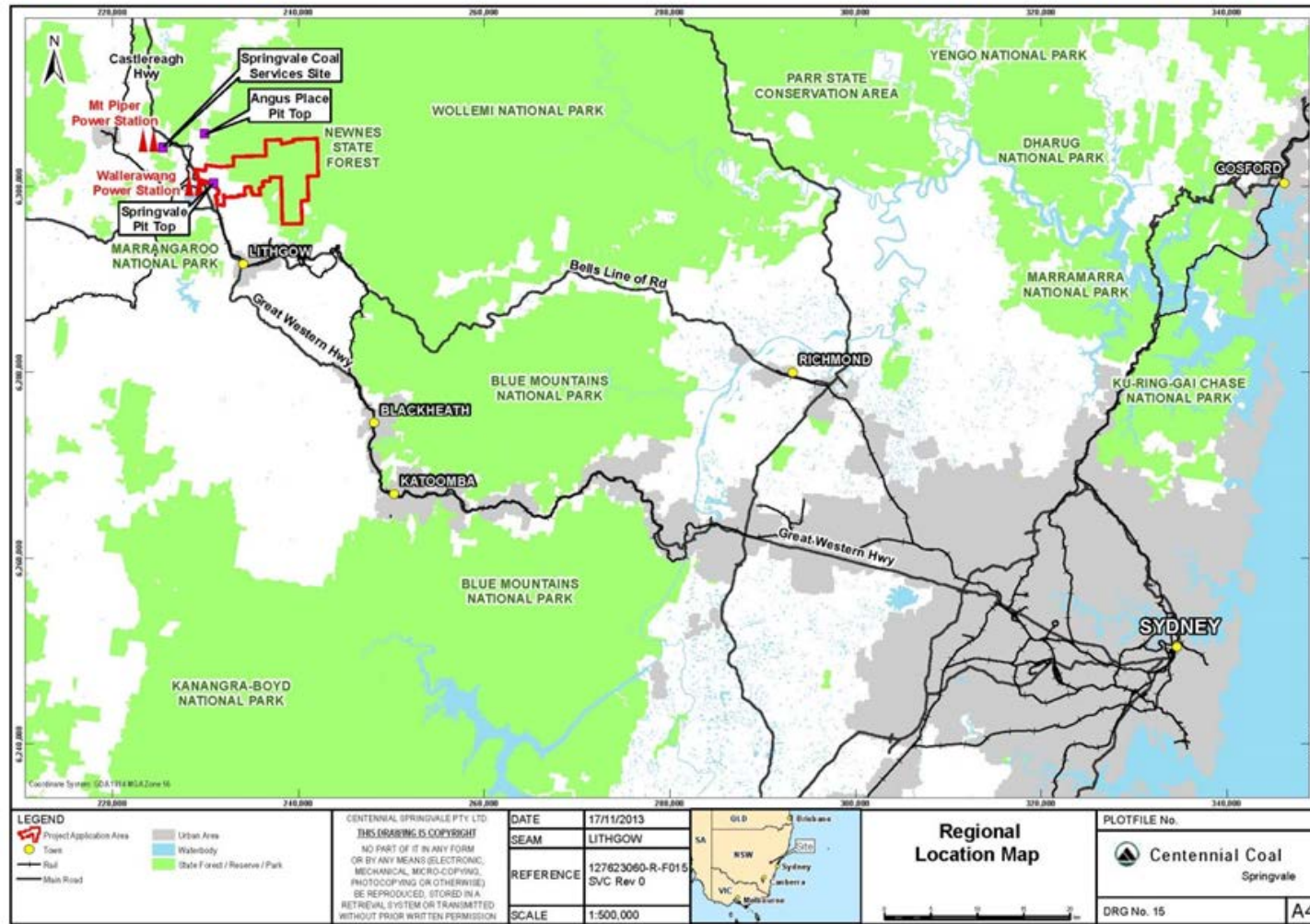


Figure 1 Regional Locality Plan

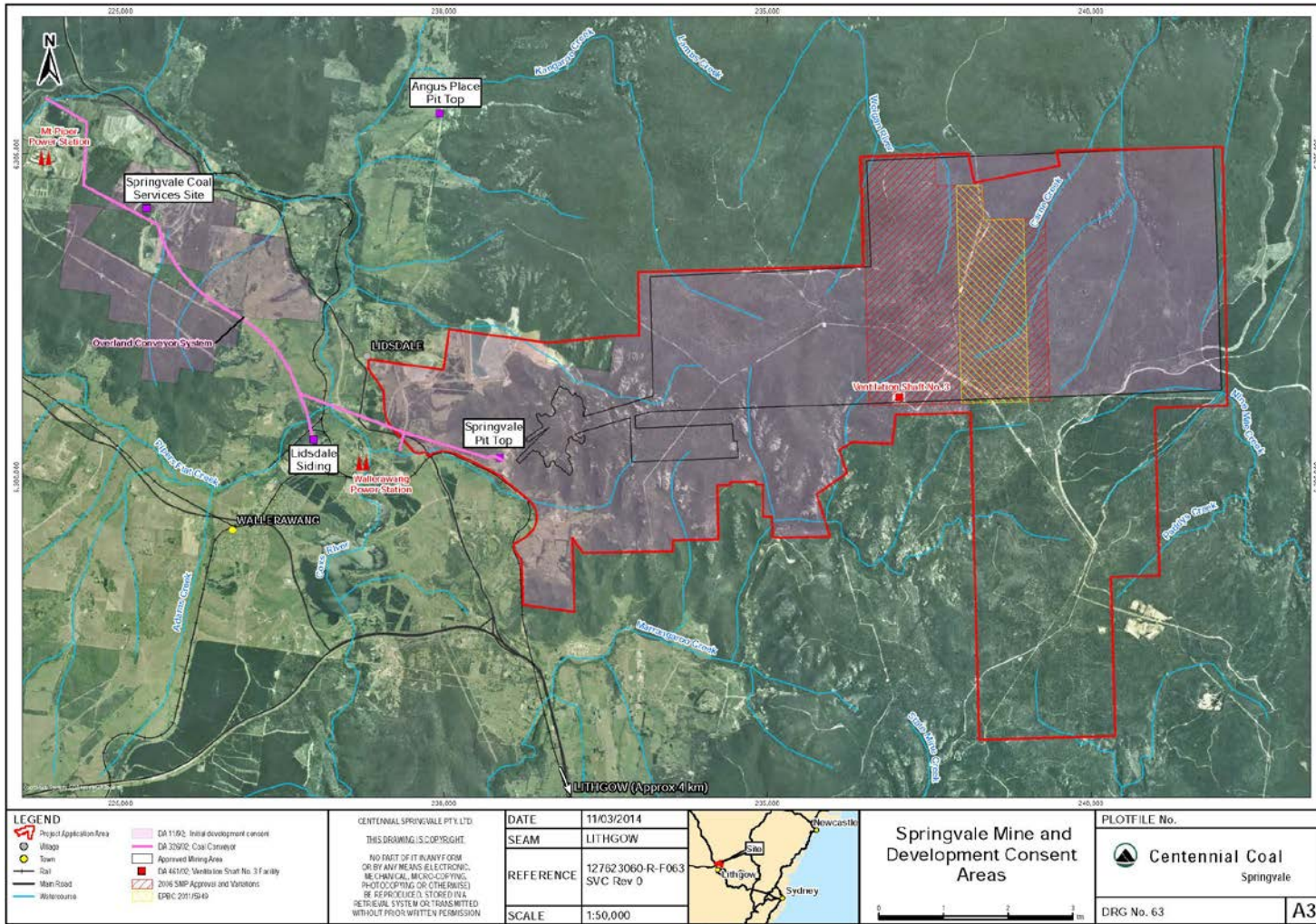


Figure 2 Development Consent Boundary

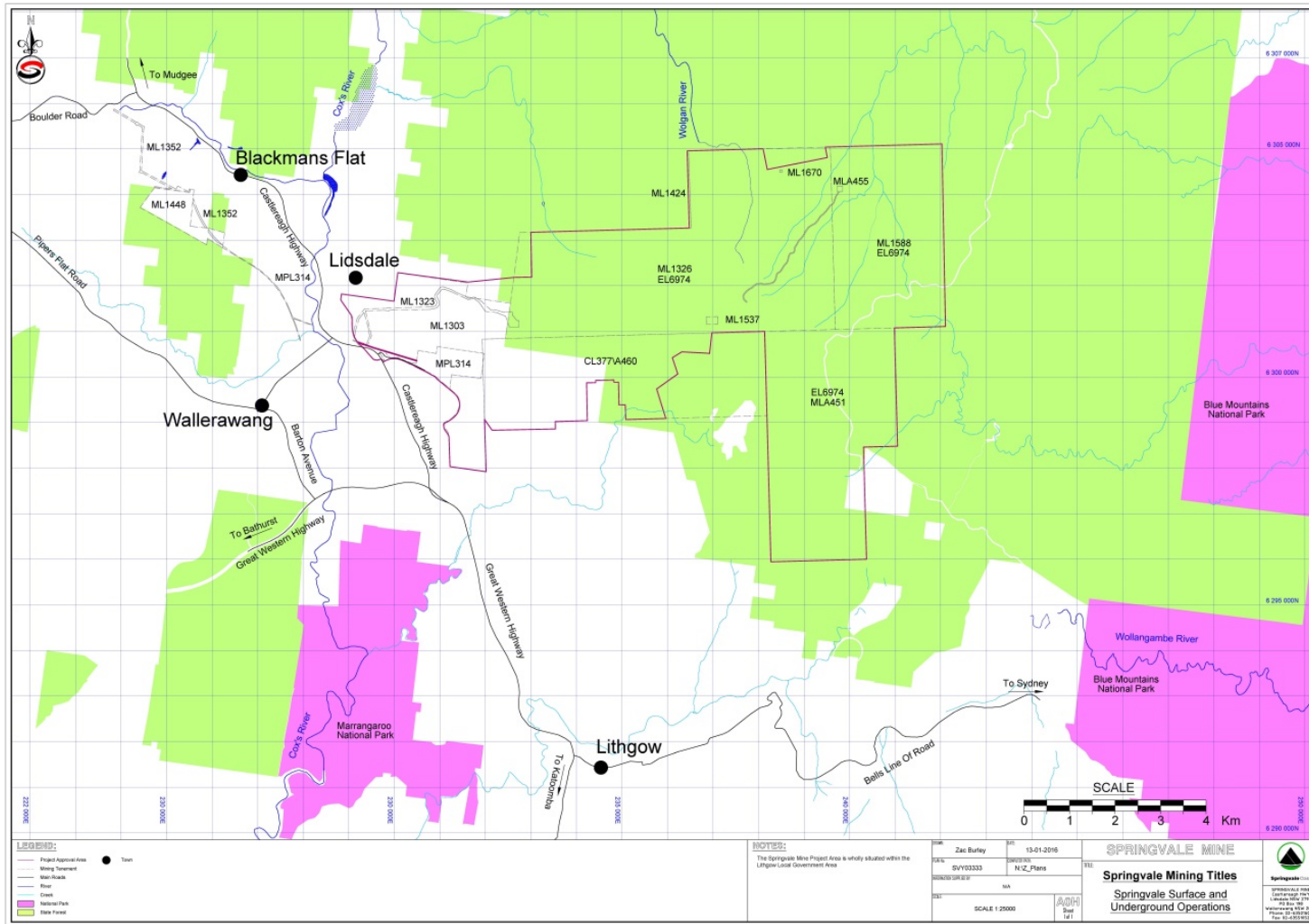


Figure 3 Mining Lease Boundaries

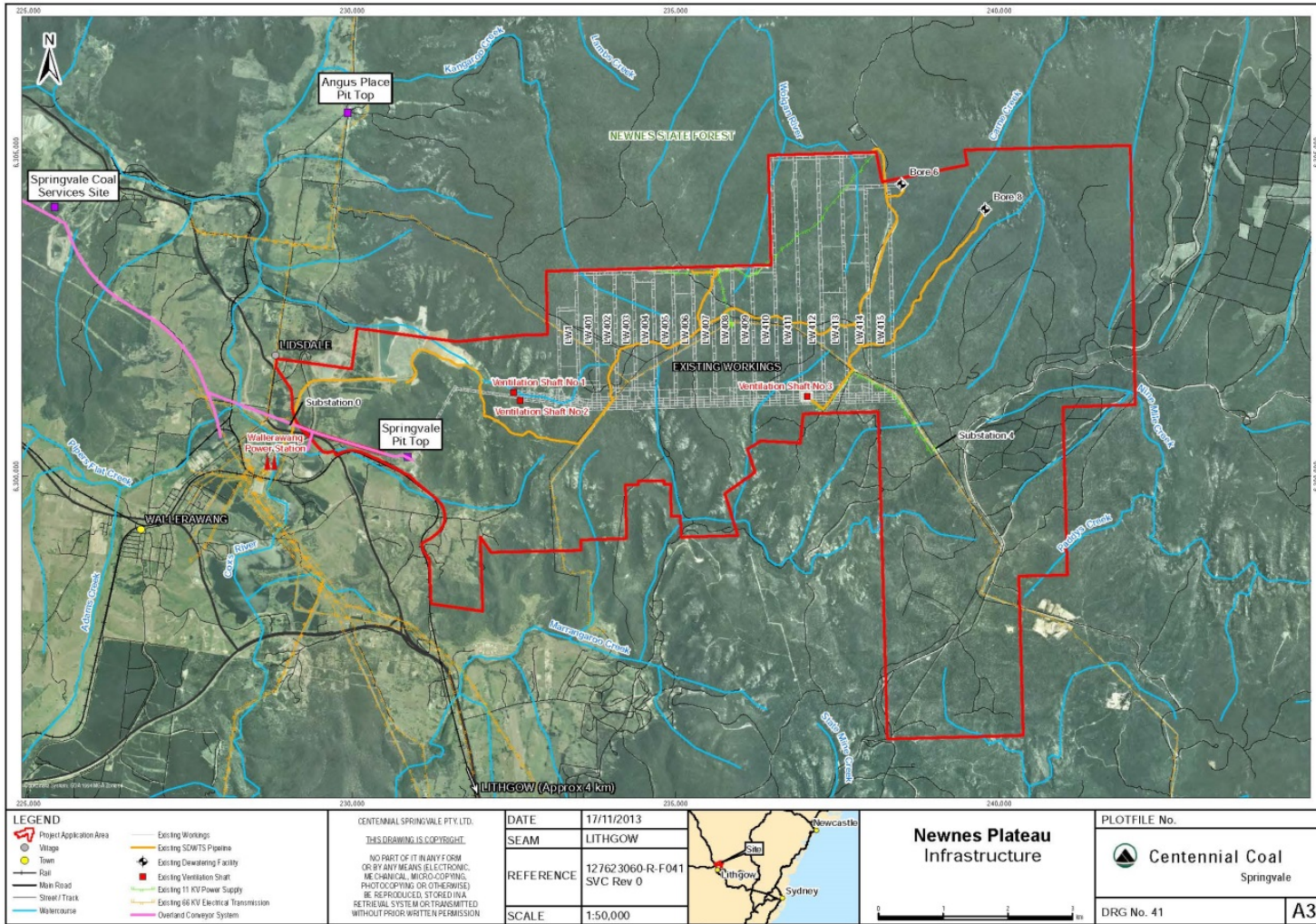


Figure 4 Newnes Plateau Operational Disturbance

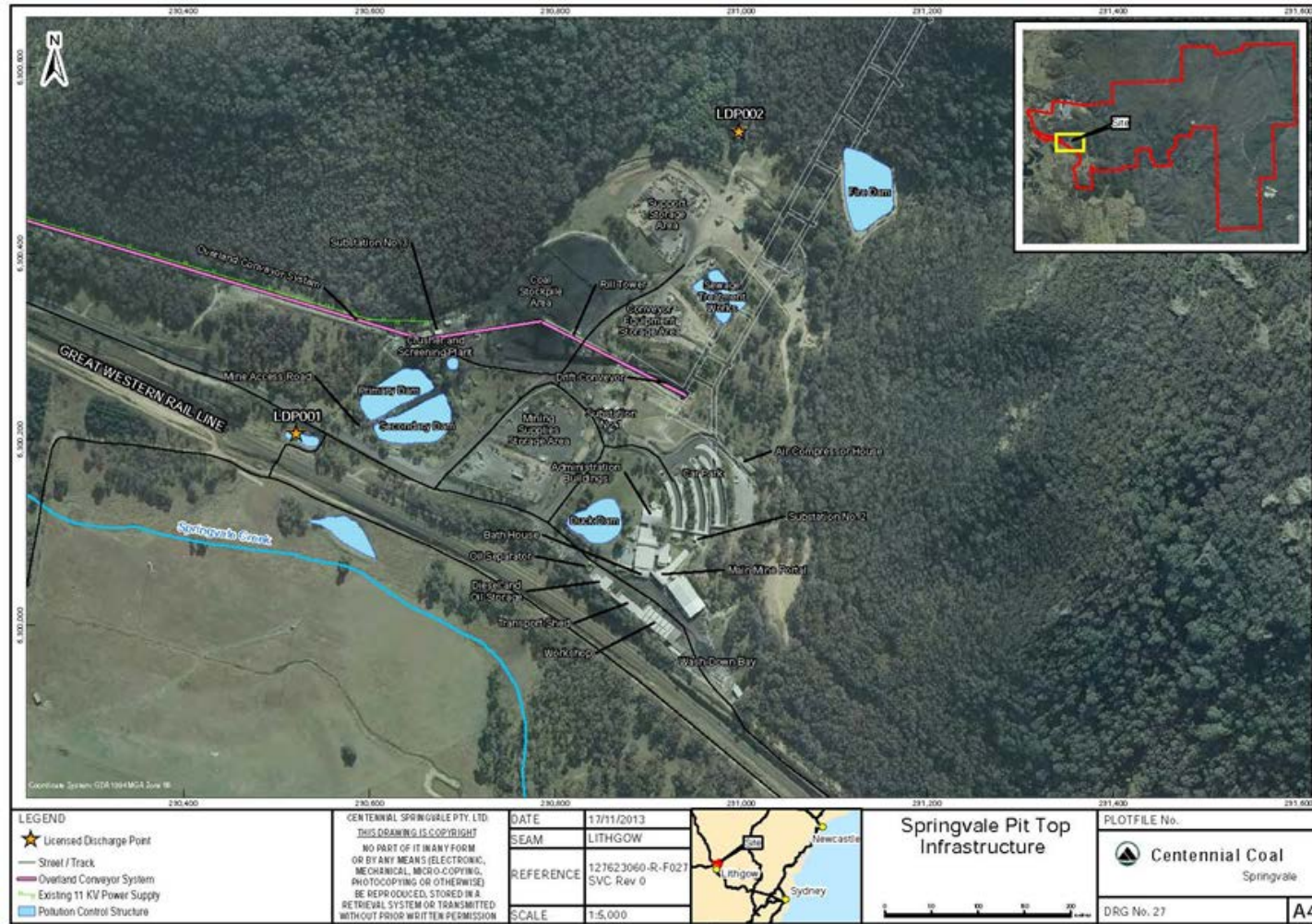


Figure 5 Springvale Pit Top Operational Disturbance

3. APPROVALS

The following sections provide a summary and lists of all approvals held by Springvale Colliery noting changes to those approvals over the reporting period.

3.1. Development Consents and EPBC Approvals

Development Consent SSD-5594 was granted to Springvale on 21 September 2015. This consent supersedes the former Development Consent DA 11/92 which will be surrendered by 21 September 2016 (in accordance with Schedule 2, Condition 10 of SSD-5594).

Springvale also operate in accordance with two federal approvals under the EPBC Act granted by the Department of Environment (former Department of Sustainability, Environment, Water, Population and Communities). Approval EPBC 2011/5949 was granted on 14 March 2012 and allows Springvale to extract coal from Longwalls 415 – 417. A second approval (EPBC 2013/6881) was issued on 15 October 2015 to allow secondary extraction associated with the Springvale Mine Extension Project SSD-5594.

Additional detail pertaining to the Springvale Development Consents and EPBC Approvals has been provided in **Table 5**.

Table 5. Development Consents and EPBC Approvals

Approval	Details	Date of Issue	Expiry
SSD-5594	Springvale Mine Extension Project	21 September 2015	31 December 2028
EPBC 2011/5949	Mining of Longwalls 415 – 417.	14 March 2012	19 March 2032
EPBC 2013/6881	Mining associated with the Springvale Mine Extension Project.	15 October 2015	8 October 2035

During the reporting period the Springvale Mine extension project was approved resulting in a new development consent and EPBC approval.

3.2. Authorisations

The Springvale holding includes Mining Lease (ML) 1303, ML 1323, ML 1326, ML 1424, ML 1537, ML 1588, ML 1670, one Coal Lease (CL) (CL 377) and one Mining Purposes Lease (MPL) (MPL 314). Springvale also undertake exploration activities in accordance with Exploration Licence (EL) 6974 and Authorisation (AUTH) 460. On 29 October 2012, 15 May 2013 and 2 June 2015 Centennial Springvale Pty Limited submitted Mining Lease Application (MLA) 445, MLA 451 and MLA 497, respectively. MLA 445 is associated with the Bore 8 dewatering facility (and the associated infrastructure corridor), MLA 451 is associated with proposed Longwalls 424 – 432, and MLA 497 is associated with Licenced Discharge Point (LDP) 009. Additional details relating to these mining tenements have been provided in **Table 6**.

Table 6. Mining Tenements

Lease	Date of Issue	Expiry
ML 1303	15 December 1992	15 December 2034
ML 1323	3 August 1993	3 August 2025
ML 1326	28 September 1993	18 August 2024
ML 1424	18 August 2003	18 August 2024
ML 1537	15 June 2003	15 June 2024
ML 1588	19 October 2006	19 October 2027
ML 1670	17 February 2012	17 February 2033
MLA 445	-	-
MLA 451	-	-
MLA 497	-	-
CL 377	24 February 1992	9 March 2025
MPL 314	3 August 1993	3 August 2035
EL 6974	13 December 2012	13 December 2017
AUTH 460	6 June 2010	6 June 2015*

#MLA 445, MLA 451 and MLA 497 were submitted 29 October 2012, 15 May 2013 and 2 June 2015, respectively.

*A renewal application for AUTH 460 was submitted on 08 May 2015. A draft renewal offer was provided by DRE 7 October 2015.

During the reporting period, no new mining leases were obtained.

In May 2005, Springvale submitted a Subsidence Management Plan (SMP) Application to the NSW Department of Primary Industries (now DRE) seeking approval for first workings and secondary extraction within Longwalls 411 – 418. SMP Approval was issued on 7 March 2006 (Reference Number 04/1673). Subsequent SMP variations were submitted and approved during 2008 to 2014 allowing various changes to the mining layout within Longwalls 413 – 418.

Additional details pertaining to the SMP Approvals and SMP Variations at Springvale have been provided in **Table 7**.

Table 7. SMP Approvals and Variations

SMP	Issue Date	Description	Purpose of Refinement
Initial SMP Approval 04/1673	2006	SMP for Longwalls 411-418	Mining lease requirement for approved SMP prior to mining and in accordance with the approved dimensions of DA 11/92. Void widths of 315 m and longwalls lengths in excess of 3,750 m.
Section 138 Approval (<i>Coal Mine Regulation Act 1982</i>)	January 2006	-	Approval to extract Longwalls 411 and 412 within the Lithgow Seam.
SMP Variation	November 2008	Reduction in Length of Longwalls 414-418	Longwalls 414 to 418 shortened by 471 m to the south to avoid a geological syncline running through the northern extent of these longwall blocks. Also as a result of this mine design modification, sensitive surface features have been avoided, including hanging swamps and pagodas to the north of Longwalls 416 to 418.
SMP Variation 08/8497	February 2009	Longwall 413 step around and reduction of Longwall 414	Step around of Longwall 413 was approved to avoid existing geological constraints. Longwall 414 shortened by approximately 700 m to the south due to anticipated geological conditions which could potentially lead to dangerous roof control issues and difficult mining conditions within the northern portion of Longwall 414.
SMP Variation 08/8497	August 2009	Changes to Longwall 413 block dimensions	Variation to the take-off face position in Longwall 413.
Clause 88 Approval	October 2009	-	Variation approval to extract Longwall 414 within the Lithgow Seam.
SMP Variation 08/8497	2010	Reduction in length of Longwall 414	Based on monitoring results and feedback from stakeholder consultation, Longwall 414 was shortened by in excess of 1,186 m. Dimensions were modified to avoid significant business interruption and production discontinuity. Another outcome of the shortening of Longwall 414 was the avoidance of Sunnyside Swamp.
SMP Variation 08/8497	2011	Changes in Mine Plan dimensions of Longwalls 416 and 417	Change of mine plan to reduce void width of Longwalls 416 and 417 from 315 m to 261 m and increase of chain pillar width from 45 m to 58 m. The new dimensions were to improve underground stability and minimise the risk of environmental impact to surface features.

SMP	Issue Date	Description	Purpose of Refinement
SMP Variation 08/8497	2012	SMP Variation Longwall 415	Change in mine plan to reduce the length of Longwall 415 due to geological conditions.
SMP Variation 11/3964	2012	SMP Variation Longwall 416	Longwall 416 was shortened based upon identification of lithology change, which posed a risk to mine safety, coal quality and production rates. Also as a result of this mine design modification, sensitive surface features have been avoided, including hanging swamps to the north of Longwall 416.
SMP Variation OUT 12/27914 OUT13/37387 OUT14/33055	2013/2014	SMP Variation Longwalls 411-418	Reduction of Longwall 416 Length to current Bore 8 drive age. Subsequent approvals under same variation for Longwalls 417 and 418
SMP Variation OUT13/2174	2013	SMP Variation Longwalls 411-418	Change in mine plan dimensions for Longwalls 411–418. Increase of pillar length to 130 m.
SMP Variation OUT13/1178	2013	Extension in time SMP Approval	Variation to extend relevant SMP approvals until 28 September 2014.
SMP Variation OUT13/21877	2013	SMP Variation Longwalls 411-418	Adjust Longwall 418 void dimensions to be consistent with Longwalls 416-417.
SMP Variation OUT14/9977	2014	SMP Variation Longwalls 411-418	Increase Longwall cutting height up to 3.5 m outside Newnes Plateau Shrub Swamp Buffer Zones (as defined by SEWPaC EPBC approval)
SMP Variation OUT 14/15149	2014	SMP Variation Longwalls 411-418	Extension of time to 30 September 2015.
SMP Variation OUT15/26505	2015	SMP Variation Longwalls 411-418	Extension of time to 30 September 2016.

As shown in **Table 7**, during the reporting period there was an SMP Variation during the reporting period.

3.3. Licences

Environment Protection Licence

Springvale currently operates under Environmental Protection Licence (EPL) 3607, issued under the *Protection of the Environment Operations Act 1997* (POEO Act). There were no changes to EPL 3607 during the reporting period.

Water Licences

Springvale currently holds four groundwater extraction licences as outlined in **Table 8**. Additionally Springvale holds licences for groundwater monitoring bores under the Water Act.

During the reporting period, centennial undertook consultation with the NSW Office of Water and was granted under s61 Zero share component New Water access licences on the 10th of December 2015. Application numbers were D1010807 for nominated works 10MW119322 which

is in the Sydney Basin Richmond Groundwater source and D1010811 for nominated works 10MW119322 which is in the Sydney Basin Coxs River Groundwater Source.

Dangerous Goods Licence

Springvale possesses Dangerous Goods Licence (NDG027897 2014 acknowledgement number) for the storage and handling of hazardous chemicals on the premises. There were no changes to the dangerous goods licence over the reporting period.

The Springvale licenses are summarised in **Table 8**.

Table 8. Licences

Licence	Date of Issue	Expiry
EPL 3607	17 May 2000	Renewed Annually
Groundwater Licence 10WA118719 (WAL 36383)	5 August 2013	Perpetuity
Groundwater Licence 10BL603519 (WAL 36383)	25 February 2010	Perpetuity
Groundwater Licence 10BL602017 (WAL 36443)	4 September 2007	Perpetuity
Groundwater Licence 10BL601863 (WAL 36446)	4 September 2007	Perpetuity
Dangerous Goods Licence	16 February 2012	Perpetuity

3.4. Other Approvals

Occupation Permit

The Newnes State Forest is located above the majority of the Springvale underground workings. Springvale has established a Level 3 Occupation Permit with the Forestry Corporation of NSW (FCNSW) to operate under the forest and to build infrastructure and other surface facilities. The permit allows for infrastructure construction and ongoing maintenance on the surface to support below ground operations, including ventilation, dewatering and electricity supply infrastructure. Level 2 Occupation permits will be discussed with the FCNSW with regards to short term duration activities such as exploration drilling. Details of the Occupation Permit have been provided in **Table 9**.

Section 95 Certificate

Springvale currently holds two Section 95 Certificates by the OEH allowing for the hand removal of weeds within Newnes Plateau Shrub Swamp, and to undertake remediation works in East Wolgan Swamp which is a Newnes Plateau Shrub Swamp. Newnes Plateau Shrub Swamps are listed as an Endangered Ecological Community (EEC) under the *Threatened Species Conservation Act 1995* (TSC Act). Previous certificates have been granted for geotechnical and geophysical investigations in addition to the installation of monitoring equipment. The certifications were issued under the TSC Act, pursuant to Section 95(2). Additional details for the Section 95 Certificates have been provided in **Table 9**.

Table 9. Occupation Permits and Section 95 Certificates

Licence	Date of Issue	Expiry	Details
Level 3 Occupation Permit – Infrastructure	17 December 2012	1 February 2018	Approval from FCNSW allowing to operate and build surface infrastructure/facilities on the surface within the Newnes State Forest to support below ground operations.
Section 95 Certificate Document No 1111270	27 June 2013	30 June 2020	Approval from OEH to allow the hand removal of weeds from within East Wolgan Swamp and Narrow Swamp.
Section 95 Certificate Document No C0000077	25 November 2013	30 June 2024	Approval from OEH to allow geotechnical/geophysical investigations and the installation of monitoring equipment within EEC.

4. OPERATIONS SUMMARY

Springvale mine has approval for the extraction of up to 4.5 million tonnes per annum (Mtpa) of ROM coal from the Lithgow Seam underlying the Project Application Area. Coal processing and distribution is managed at the Springvale Coal Services site in accordance with the Western Coal Services Project (State Significant Development 12_5579). The exception for this is the transport of up to 50,000 tonnes per annum of coal from the Springvale pit top to local domestic customers by road haulage

Table 10 presents a production summary as applicable to SSD 5594 only.

Table 10. Production Summary

Material	Approved Limit (and source)	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Next Reporting Period (Forecast)
Waste Rock/ Overburden	NIL	Not Applicable	Not Applicable	Not Applicable
ROM Coal	4.5 million tonnes per calendar yr (Source: SSD5594 S2 C6)	3.487621 Mt	3.531844	4.5Mt
Coarse reject	NIL	Not Applicable	Not Applicable	Not Applicable
Fine reject (Tailings)	NIL	Not Applicable		
Saleable product	NIL	Not Applicable	Not Applicable	Not Applicable

There are no inconsistencies between approved limits and actual production.

4.1. Other Operations

All operational management of coal processing and transport facilities is undertaken by the Western Coal Services Project (State Significant Development 12_5579), except for for the transport of up to 50,000 tonnes per annum of coal from the Springvale pit top to local domestic customers by road haulage which is needed to be authorised by SSD 5594.

Springvale's operational summary is presented in Table 11 while operations relating to the Western Coal Services Project is reported in the Western Coal Services Annual Review.

Table 11. Operations Summary

	Approved Limit (and source)	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Comment (if applicable)
Hours of operation	24 hours a day, 7 days a week (Source: SSD5594 S2 C7)	24 hours a day, 7 days a week	24 hours a day, 7 days a week	No change
Transport (rail)	NIL	Not Applicable	Not Applicable	Not Applicable
Transport (road)	50,000 tonnes of ROM Coal per calendar yr (Source: SSD5594 S2 C8)	2,775.00	2, 799.50 tonnes	Within Approved limits

4.2. Next Reporting Period

In 2016 the following activities are envisioned to be undertaken by Springvale:

- Completion of the Extraction of Longwall 418.
- Extraction Plan consultation and approval for Longwall 419
- Commencement of Longwall 419
- Preparation and consultation of Management Plans required under SSD 5594
- Approved construction activities e.g. Bore 9
- Independent Audit 2016
- New MOP

5. ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

Table 12. Actions from previous Annual Review

Requested By	Action Required	Action Taken	Where addressed in Annual Review
DRE	2014 AEMR section 1.1: Confirm all leases are included	Leases are outlined in table 6 and shown in Figure 7	Pg 10 and Pg 14
	2014 AEMR section 2.0: First column should be Activities Proposed in, not undertaken in	Noted- Annual Review Guideline Followed for 2015 rather than AEMR guideline	Noted- Annual Review Guideline Followed for 2015 rather than AEMR guideline
	2014 AEMR section 2.8 and Appendix 5: Ensure consistency naming of dams in text, table 12 and site plans	Noted- Annual Review Guideline Followed for 2015 rather than AEMR guideline	
	2014 AEMR section 3.6 and 3.7: These sections should be combined of information clearly separated	Noted- Annual Review Guideline Followed for 2015 rather than AEMR guideline	
	2014 AEMR Rehabilitation: Need consistent totals in Section C and E within the same columns	Noted- Annual Review Guideline Followed for 2015 rather than AEMR guideline	
	2014 AEMR Plans: Need to show more clearly location of rehabilitation completed as covered in table 43 and some hard copies should be increased in size	Noted- Annual Review Guideline Followed for 2015 rather than AEMR guideline	Figure 6
DPE	Production Data revision request	A response on the 15 th of June 2015 was provided to the department on the listed items with relevant references to information and documents provided. There no comments received	Noted- Annual Review Guideline Followed for 2015 rather than AEMR guideline
	Comments regards LDPs 2, 6, and 7		
	Information regarding research and trials being undertaken regarding removal		

	of soluble arsenic from the discharge waters	from the department on the response provided	
	Request for copy of specialist reports in relation to Low frequency Noise		

6. ENVIRONMENTAL PERFORMANCE

This section covers requirements presented in the annual review guideline. The table has included monitoring results over the 2015 reporting period however the approval criteria applies to SSD 5594 which was not graded until the 21st of September 2015

The subsidence management status reports prepared and submitted by Springvale presents results required under SMP LW411-418.

Table 13. Environmental Performance

Aspect	Approval criteria/ EIS prediction ¹					Performance during the reporting period (Max Result)					Trend/ key management implications	Implemented / proposed management action	
	Location receiver number	Day (L _{AEQ15min})	Evening (L _{AEQ15min})	Night (L _{AEQ15min})	Night (L _{A1 1min})	Location receiver number	Day (L _{AEQ15min})	Evening (L _{AEQ15min})	Night (L _{AEQ15min})	Night (L _{A1 1min})			
Noise	S1	44	44	46	52	S1	40	41	41	49	Results are within the criteria and are not significantly different from previously obtained results	During 2016 centennial will submit a Western Region Noise Management Plan	
	S2	43	43	46	53	S2	39	44	48	51			
	S3	35	35	35	60	S3	<30	<30	<30	Inaudible			
	All other Privately owned Land	35	35	35	45	All other Privately owned Land	30	34	34	34			
Air quality	Pollutant	Averaging Period	Criterion			Pollutant	Averaging Period	Max Result			Results are within the criteria and are not significantly different from previously obtained results	During 2016 Centennial will submit a Western Region Air Quality and Greenhouse Gas Plan	
	PM ₁₀	Annual	30			PM10	Annual	25					
	PM ₁₀	24 hour	50			PM10	24 hour	25					
	TSP	Annual	90			TSP	Annual	55					
	Deposited Dust	Annual	2g/m ² /month	4g/m ² /month		Deposited Dust	Annual Average	DG1: 1.53/m ² /month DG2 0.68/m ² /month					
Biodiversity	Ecology	No significant impacts are predicted on threatened species or					Complaint- Flora monitoring concludes the monitoring data					Monitoring	Monitoring

		EECs; and	indicates that prolonged dry and warm conditions on the Newnes Plateau are having a substantial impact on swamp condition and is likely to be acting independent of any mining related impacts.	demonstrates compliance with the performance criteria and condition of SMP Approval. Results obtained are not considered significantly different from previous year	and Management will continue to be undertaken in accordance with the SMP approval and future extraction plan requirements.
		No significant impacts are predicted on aquatic habitats, flora, fauna or stygofauna	Complaint-Monitoring has been undertaken in accordance with approved monitoring programs and conclude no discernible impacts from underground mining at Springvale Colliery on fauna. Flora monitoring concludes the monitoring data indicates that prolonged dry and warm conditions on the Newnes Plateau are having a substantial impact on swamp condition and is likely to be acting independent of any mining related impacts.	Monitoring demonstrates compliance with the performance criteria and condition of SMP Approval. Results obtained are not considered significantly different from previous year	Monitoring and Management will continue to be undertaken in accordance with the SMP approval and future extraction plan requirements.
	Conservation Areas	The nearest conservation reserve, the Gardens of Stone National Park and the wider Blue Mountain World Heritage Area, will not experience any measurable subsidence movements as a result of the Project.	Not Applicable	Not Applicable	Not Applicable
	Swamps	Longwall mining by the Project is unlikely to have a significant impact on swamps.	Compliant- Springvale has undertaken mining activities and monitoring activities in accordance with SMP 411-418 approval requirements	Monitoring demonstrates compliance with the performance criteria and condition of SMP	Monitoring and Management in accordance with 411-418 SMP EMP approval

				Approval. Results obtained are not considered significantly different from previous years.	requirements which includes the LW 418 THPSS MMP
Heritage	Aboriginal Heritage	Subsidence at site 45-1-0002 may cause the sandstone where the grinding groove is or was located to fracture and damage the site should it still remain. The recent survey was unable to find any evidence remaining of the site, probably due to the extensive vehicle traffic; and	Complaint- Subsidence has not been experienced at these site locations due to current mining position	There has been no aboriginal heritage items impacted by subsidence by Springvale	Monitoring and Management in accordance with Western region Cultural Heritage Management Plan
		Predicted subsidence at sites 45-1-0005 and 45-1-0065 is not expected to damage	Complaint- Subsidence has not been experienced at these site locations due to current mining position	There has been no aboriginal heritage items impacted by subsidence by Springvale	Monitoring and Management in accordance with Western region Cultural Heritage Management Plan
	Historic heritage sites	No historic heritage items and/or National Heritage Places have been identified within the Project Application Area or assessed to be impacted upon by the Project. As such, there are no historic heritage impacts associated with the Project.	Not Applicable	Not Applicable	Not Applicable

1.1.1. Noise

Noise monitoring has been undertaken in accordance with Springvale Colliery's Noise Management Plan. Results obtained during the reporting period are within the performance criteria prescribed in the EPL. A specialist consultant has been engaged to undertake Low Frequency Noise investigations.

1.1.2. Air Quality

Air quality monitoring has been undertaken in accordance with EPL 3607 requirements. The results obtained are significantly below the criteria in SSD5594.

1.1.3. Biodiversity

A comprehensive environmental monitoring program has been prepared which covers the LW411-418 SMP Area in accordance with relevant conditions of the SMP Approval. Additional Management plans exist under EPBC 2011/5949 and 2013/6881. Monitoring and management of biodiversity impacts has been undertaken in accordance with these documents. Results are presented in the SMSR and EPBC Annual Report and concur that no significant impact has been observed.

1.1.4. Heritage

The first aboriginal heritage site to be undermined as applicable to SSD 5594 is an isolated artefact (Site #45-1-2739) which is located above Longwall 419. The only effect of subsidence is that these sites will be located at a slightly lower elevation than that at which they now exist, the extent of which depends on the site's location in relation to the longwalls. The monitoring and management will be undertaken in accordance with the heritage management plan prepared under schedule 3 Condition 10h.

1.2. Waste

As required under Schedule 4 Condition 27, this section reports on effectiveness of waste management and minimisation.

The major general waste streams from the mine include water, packaging material including plastic, paper and cardboard, wood, waste oil, oil filters, oil drums, scrap metal, hoses, bottles (plastic and glass), sewage effluent, as well as general putrescible rubbish. Non-production waste was managed in accordance with the EIS and MOP.

During the reporting period a recycling rate of 39.78% (Total offsite waste tonnes/Recycled waste) was achieved. This compares to 32.16% in 2014.

Waste management practices are therefore considered effective at Springvale Colliery.

7. WATER MANAGEMENT

1.3. Water Licences

The following table presents water take for Springvale 2014/2015 FY. It is important to note that Table 14 reports on the WATER YEAR which is from 1 July to 30 June, not the calendar year.

Table 14. Water Take

License #	Water Sharing Plan, source and management zone (as applicable)	Entitlement	Passive take inflows /	Active pumping	TOTAL
WAL 36383	Sydney Basin Richmond Groundwater Source	5,958	N/A	4950.7 ML	4950.7 ML
WAL 36446	Sydney Basin Coxs River Groundwater Source	3,300	N/A	451.1 ML	451.1 ML
WAL 36443	Sydney Basin Coxs River Groundwater Source	585	N/A	177.6 ML	177.6 ML

Volume is reported in annual megalitres (ML)

1.4. EPL Results

The following tables provide a summary of results obtained for 2015 under EPL 3607. In 2016 Springvale will prepare a Site Water Management Plan as required under Schedule 4 Condition C14. Licenced Discharge Points 6 and 7 are not associated with SSD 5594.

1.4.1. Water Quality

Table 15. LDP001 Quality

Pollutant	Unit of measure	Lowest sample value	Mean of sample	Highest sample value
Conductivity	microsiemens per centimetre	184.00	910.62	1136.00
Filterable iron	milligrams per litre	<0.05	0.021	0.130
Filterable manganese	milligrams per litre	<0.001	0.005	0.020

Oil and Grease	milligrams per litre	<5	0.67	8.00
pH	pH	7.07	8.34	8.92
Total suspended solids	milligrams per litre	<5	1.15	8.00

Table 16. LDP009 Quality

Pollutant	Unit of measure	Lowest sample value	Mean of sample	Highest sample value
Aluminium (dissolved)	milligrams per litre	<0.01	0.03	0.17
Arsenic (dissolved)	milligrams per litre	0.006	0.013	0.026
Boron (dissolved)	milligrams per litre	<0.05	0.06	0.08
Conductivity	microsiemens per centimetre	1098.00	1180.04	1310.00
Copper (dissolved)	milligrams per litre	<0.001	0.001	0.014
Fluoride	milligrams per litre	1.10	1.23	1.40
Iron (dissolved)	milligrams per litre	<0.05	0.01	0.39
Manganese (dissolved)	milligrams per litre	<0.001	0.006	0.017
Nickel (dissolved)	milligrams per litre	0.001	0.003	0.004
Oil and Grease	milligrams per litre	<5	0.2	10.0

There were no discharges from Licensed Discharge Points 4, 5 and 10 therefore no water quality results are included.

Water Volume

Licensed Discharge Point	Annual Total (kilolitres)
LDP001	259929.66
LDP002	7642.1
LDP004	No discharge
LDP005	No discharge
LDP009	8224950.15
LDP010	No discharge

8. REHABILITATION

1.4.2. I Rehabilitation in 2015

Due to the underground nature of mining operations at Springvale, surface disturbance and the need for progressive rehabilitation is relatively minor compared to that required at an open cut mining operation. No major rehabilitation of the pit top and Newnes Plateau infrastructure is anticipated until site closure.

Springvale has adopted a progressive approach to rehabilitation to reduce and mitigate potential environmental impacts. Facilities no longer required, for example, exploration sites, or ventilation and dewatering facilities, are rehabilitated soon after decommissioning, to return disturbed land to the original landform. Rehabilitation is followed up with periodic inspections and maintenance as necessary based upon evidence of endemic regrowth, weeds and soil disturbance. Rehabilitation acceleration techniques are undertaken, if required following approval from the Forestry Corporation of NSW and in accordance with the Occupation Permit.

During the reporting period no rehabilitation or disturbance was undertaken. Additionally, there has been no change in disturbance footprint in 2015.

The status of mining and rehabilitation as at the end of 2015 is presented in Table 17 and Figure 6.

Table 17. Rehabilitation Status

Mine Area Type	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Next Reporting Period (Forecast)
	Year 2014 (ha)	Year 2015 (ha)	Year 2016 (ha)
A. Total mine footprint²	68.5	68.5	80.9
B. Total active disturbance³	61.5	61.5	67.1
C. Land being prepared for rehabilitation⁴	0	0	6.8
D. Land under active rehabilitation⁵	7	7	7
E. Completed rehabilitation⁶	0	0	0

The 7 ha of land under rehabilitation as at the end of 2015 relates to the Bore 1 – Bore 4 dewatering facilities, services corridor to the Bore 8 dewatering facility, Old Fire Dam and the Settlement Pond Site.

² **Total Mine Footprint:** includes all areas within a mining lease that either have at some point in time or continue to pose a rehabilitation liability due to mining and associated activities. As such it is the sum of total active disturbance, decommissioning, landform establishment, growth medium development, ecosystem establishment, ecosystem development and relinquished lands (as defined in the DRE MOP/RMP Guidelines). Please note that subsidence remediation areas are excluded.

³ **Total Active Disturbance:** includes all areas requiring rehabilitation

⁴ **Land being prepared for rehabilitation:** includes the sum of mine disturbed land that is under the following rehabilitation phases – decommissioning, landform establishment and growth medium development (as defined in DRE MOP/RMP Guidelines)

⁵ **Land under active rehabilitation:** includes areas under rehabilitation and being managed to achieve relinquishment – includes ‘ecosystem and land use establishment’ and ‘ecosystem and land use sustainability (as defined under the DRE MOP/RMP Guidelines)

⁶ **Completed rehabilitation:** requires formal sign off from DRE that the area has successfully met the rehabilitation land use objectives or completion criteria

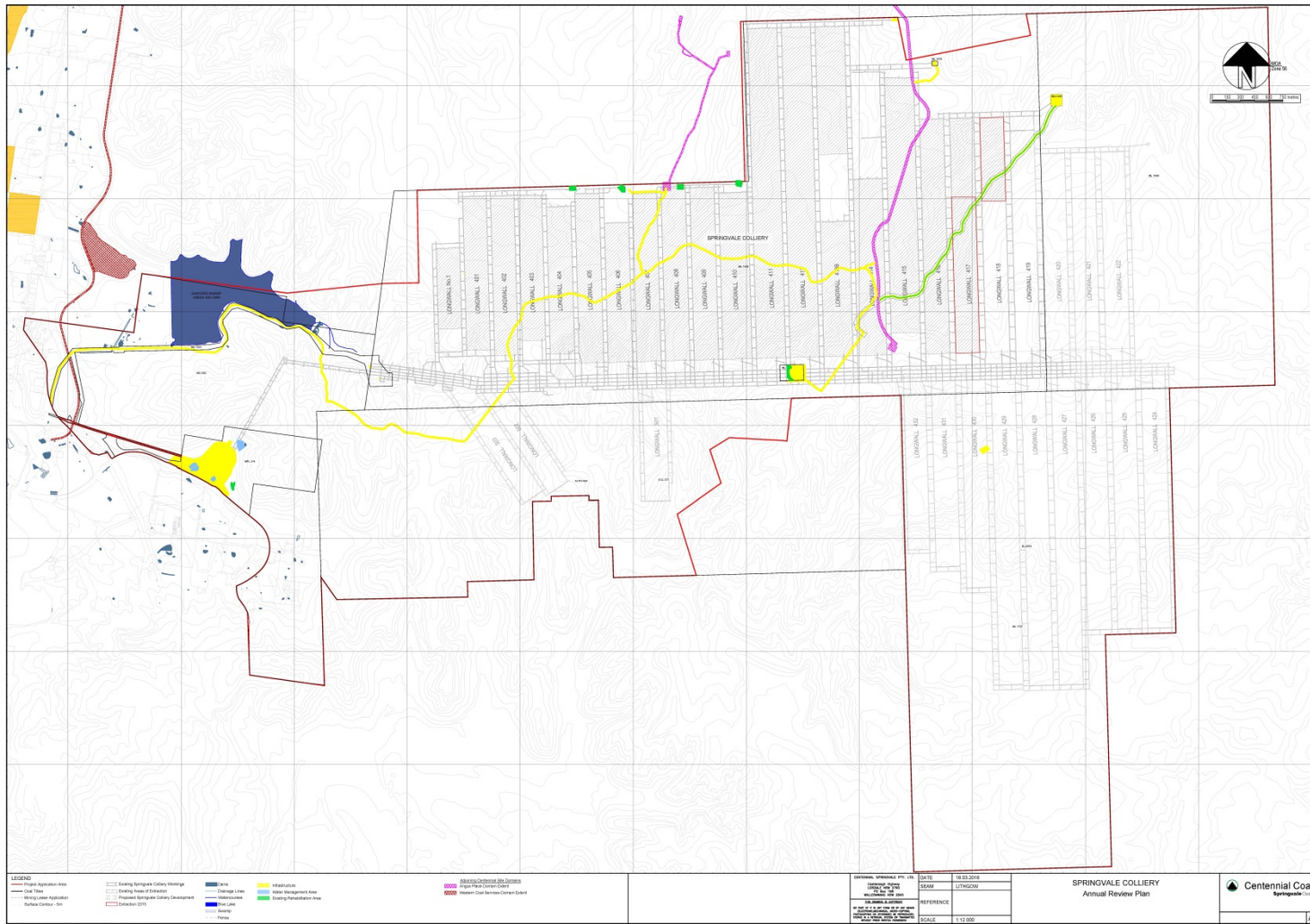


Figure 6 Disturbance, Rehabilitation and Mining at 31 Dec 2015

1.4.3. Rehabilitation Monitoring

Rehabilitation monitoring was undertaken during 2015, on the Newnes Plateau and at the Pit Top. Five rehabilitation monitoring sites were established:

- SPR 1 – this rehabilitation site was previously used as a dam. The Old Fire Dam has since been infilled with soil and or seeded with native vegetation;
- SPR 2 – this rehabilitation site on the Newnes Plateau is associated with the infrastructure corridor to the Bore 8 Dewatering Facility;
- SPR 3 – rehabilitation site on the Newnes Plateau at the previous Bore 1 Dewatering Facility;
- SPR 4 – analogue site for the Pit Top located upslope from SPR 1; and
- SPR 5 – analogue site on the Newnes Plateau.

A summary of monitoring results at the rehabilitation sites is provided below:

SPR 1

This site was found to be performing well in terms of stability and retention of materials (according to landscape organisation indices and soil surface indices). Despite the favourable scores, numerous bare soil patches were visible on the steeper sections of the transect during the 2015 survey. These exposed areas appeared to be stable, however it was noted that they would likely benefit from some additional soil protection to avoid future erosion.

The vegetation on this site was well established and contained a relatively high diversity of native species. It was noted that the site is dominated by wattle (*Acacia*) and Dogwood regrowth in the canopy and understorey strata. This is often encountered on rehabilitation sites and may resolve naturally as *Acacia* individuals die off (lifespan generally 10 - 15 years) or may be 'progressed' by thinning some of the *Acacia* vegetation and introducing long stem planting of native eucalypts.

No exotic plant species were observed at this site. Future weed growth problems were noted as being unlikely.

SPR 2

Native plant regeneration on this site is expected to continue naturally. It was noted that the thick cover of logs and woody debris dispersed across the site may retard seed germination rates and seedling establishment in its early stages (when seeds require space and sun exposure to germinate). Nonetheless, it was noted as apparent that native plants are readily growing between the woody debris and this growth is expected to increase.

There was no evidence of any significant erosion on the site and therefore no further soil surface management was required. No exotic plant species were observed at this site.

SPR 3

The native vegetation on this site was noted as being in good health and had already reached the species diversity of the respective analogue site (SPR 5). Similar to the other rehabilitation sites, no problematic erosion was apparent and material retention was noted as likely to increase as vegetation becomes more established. No further soil surface management was required.

No exotic plant species were observed at this site.

1.4.4. Agreed Post-Rehabilitation Land Use

Following the cessation of mining operations at Springvale, the pit top and all rehabilitated areas on the Newnes Plateau will be rehabilitated to woodland commensurate with the adjacent remnant vegetation. The *Springvale Mine Extension*

Project Decommissioning and Rehabilitation Strategy (SLR 2014) prepared as a component of the EIS commits to the final land use for these areas becoming 'environmental protection works' which is consistent with the surrounding land use of forestry within the Newnes State Forest. Additionally the final land use aligns with the current Lithgow Local Environmental Plan (LEP) 1994, the Draft Lithgow LEP 2013 and the Lithgow Draft Land Use Strategy 2010 – 2030.

1.4.5. Rehabilitation Maintenance

East Wolgan Swamp was impacted over a period of years by Regulator approved mine water discharge and in combination with potential subsidence effects.

The East Wolgan Swamp major slump and the piping area were rehabilitated in accordance with the s 95 Certificate issued by OEH with major works completed through 2014 by The Bush Doctor swamp rehabilitation specialist. A joint inspection with OEH, Bush Doctor and Centennial was undertaken on 10 December 2014 as per the s 95 Certificate. Work continued on with final brush-matting activities into the New Year in January 2015. A report on that phase of the rehabilitation was provided to OEH in February 2015 with an interim report in May 2015, and a further routine report to follow in February 2016. A range of regulatory inspections were undertaken in 2015 by DRE, OEH, DP&E and Federal Department of the Environment. These inspections were linked to the Springvale approval and other mandatory inspections. Centennial Coal will continue to enhance the re-hydration and revegetation efforts in East Wolgan Swamp.

1.4.6. Renovation/Removal of Buildings

No permanent buildings were removed from Springvale during 2015.

1.4.7. Exploration and Construction Works

During the reporting period there were no exploration or construction activities.

1.4.8. Rehabilitation Sign Off from the DRE

During 2015 no rehabilitation areas received formal sign-off from DRE that they were completed to a standard suitable for lease relinquishment.

1.4.9. Variations in Activities from the MOP

During 2015 a new MOP was developed for the site. This document covered rehabilitation activities from November 2015 to October 2022. There were no variations to the MOP that required notification to DRE.

1.4.10. Key Issues Affecting Successful Rehabilitation

The MOP identified a number of issues that have the potential to affect rehabilitation at Springvale. These included:

- Greater than anticipated subsidence impacts;
- Erosion and sedimentation;
- Poor topsoil quality;
- Subsidence impacts on steep slopes; and
- Bushfire.

During 2015, none of these issues were encountered. Consequently no management measures were required to be implemented to address these issues.

1.4.11. Next Reporting Period

Rehabilitation at Springvale will be undertaken progressively and will involve partial rehabilitation of the following disturbed areas after completion of construction on Newnes

Plateau. Rehabilitation and disturbance in 2016 is summarized in **Table 17**, and includes:

- 5.6 ha of disturbance associated with construction of the Mine Services Borehole, Bore 9 Dewatering Facility and associated infrastructure corridors (11.6 ha), as well as the Booster Pump Station 1 (0.4 ha) and the infrastructure corridor from the Borehole Pump Station to Booster Pump Station 2 (0.4 ha); and
- In 2016 6.8 ha of land will be prepared for rehabilitation, post construction works. These areas include the infrastructure corridors to the Mine Services Borehole and Bore 9 Dewatering Facility (6.4 ha), and the infrastructure corridor from Borehole Pump Station to Booster Pump Station 2 (0.4 ha).

In 2016 work is planned to be undertaken to continue re-hydration and revegetation of East Wolgan Swamp with a commitment to working on the most severely affected areas of the upland swamp community in alignment with the s 95 Certificate issued in response to the s 91 condition: *The rehabilitation works will also include a significant commitment to ongoing monitoring and maintenance.* This work will include the monitoring and where required maintenance of structures used as part of the works, removal of weeds, and where appropriate redesign and implementation of further structures, coir logs and associated materials. Restoration works will be performed in accordance with the ‘Save Our Swamp’ soft engineering solutions for swamp remediation (SOS 2010). The 2016 budgeted works will focus on the implementation of further structures, coir logs and associated materials with the intent of further hydrating and revegetating the swamp. Considerable negative stakeholder scrutiny has been placed on the state of bare areas of the swamp especially between the slump and the piped areas and rehabilitation works in these zones will be of priority.

9. COMMUNITY

9.1. Environmental Complaints

During the reporting period there was one community complaint received in relation to Springvale Colliery. The complaint was made to the colliery regarding a vehicle entering the highway from the mine access road at 5:30 am on the 28/9. It is unknown whether the vehicle has come from the colliery. Springvale apologised to the complainant and explained such behaviour was not condoned and should be reported to authorities. The mine committed to logging the incident as a complaint although as it a public road it was not known whether the vehicle has come from the colliery. A toolbox talk was issued to the workforce in relation to road safety.

Trends in community complaints are documented in the following table.

Table 18. Community Complaint Trends

	2013	2014	2015
Number	2	2	1
Category	2 noise	2 Low Frequency Noise	1 Traffic

As evidenced from the table above, there is no apparent trend from the traffic related complaint received during the reporting period.

9.2. Community Engagement

1.4.12. CCC

A Community Consultative Committee (CCC) has been established to monitor the operations and provide a forum whereby the community can communicate with the mine operators and be kept up to date with the progress of the mine.

In 2012 the established Angus Place CCC was combined to also include Springvale Coal. Furthermore in October 2014 the CCC was also expanded to include Western Coal Services.

The combined Angus Place, Springvale and Western Coal Services CCC to facilitate a single channel of communication about current operations in the area.

The committee is composed of:

- An independent chairperson;
- Four representatives from Centennial Coal, including the Environment and Community Officer;
- One representative from Council; and
- At least three representatives from the local community.

During the 2015 reporting period two CCC meetings were held on 1st April 2015 and 14th October 2015. Minutes from the meeting are available on the Centennial Coal website

The Western Region Consultative Committee meet on a regular basis to find the best solution(s) to the following challenges:

- Respecting the local and regional environment;
- Minimising adverse impacts of mine operations on people, homes, and businesses;
- Supporting the economic, social and cultural life of the area; and
- Maintaining profitable and efficient mine operations that meet regulatory requirements.

Meetings will continue to be held during 2016.

1.4.13. Community Contributions

Centennial continued to support local community projects/events/citizens during the reporting period. In 2015 this included but is not limited to:

- Support for the 2015 Show (Lithgow Show Society)
- Camp (Australian Air League NSW Boy's Group City of Lithgow Squadron)
- Solar Panels (Pied Piper Preschool)
- Daffodils at Rydal 2015 (Rydal Village Association Inc)
- ANZAC Service (Wallerawang ANZAC Service Committee)
- NAIDOC Day Celebrations (Mingaan Wiradjuri Aboriginal Corporation)
- Lithgow Team Kar 350 (Kidney Kar Rally - Team Lithgow)

1.4.14. Community Activities

Centennial continued participate in local community activities during the reporting period. Activities included but was not limited to Daffodils at Rydal, Wallerawang ANZAC Service, NAIDOC Day celebrations, Portland Central School presentations.

1.4.15. Community Enhancement

As required under Schedule 2 Condition 15 of SSD 5594, Centennial shall pay a community contribution to LCC of \$0.03 per saleable tonne of coal produced from Springvale, Angus and Airly mines capped at \$200,000 by 31 March each yr from the 31 of March 2016.

The Longwall commenced on the 15th of October following receipt of the EPBC 2013/6881. For the period 15th of October to 31 December 2015 a payment of \$32,095.50 will be made.

Centennial looks forward to finalising with Council how this annual community contribution will be allocated for long term community activities and projects. Future annual reviews will provide an update on long term community activities and projects agreed with by Centennial and LCC as required under the conditions of consent.

10. INDEPENDENT AUDIT

As required under SSD 5594 Schedule 5 Condition 3, prior to 30 June 2016, and every 3 years thereafter unless the Secretary directs otherwise, Springvale will commission and pay the full cost of an Independent Audit of the development. No independent audits were therefore conducted on SSD 5594 during the reporting period.

11. INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD

The following tables provide a summary of non-compliances identified in Section 1 of the Annual Review (this document).

12. SSD 5594 Manning

Nature of the incident/non-compliance	Site Manning numbers
Date of incident/ non-compliance (if known; if not known state not known)	2015
The location of the incident/ non-compliance (include a figure if appropriate), if known	Springvale Operation
Detail the cause of the incident/non-compliance	Increased Production as a result of Angus Place being on Care and Maintenance
Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance	No adverse effects to the community as a result of increased workforce
Detail action that has been, or will be, taken to prevent recurrence of the incident/ non-compliance	A modification to SSD 5594 is currently being prepared for Springvale to align manning with current and future site demands.

Table 19. Mining Lease Compliance Report

Nature of the incident/non-compliance	Timing of Submission Compliance Report
Date of incident/ non-compliance (if known; if not known state not known)	2015
The location of the incident/ non-compliance (include a figure if appropriate), if known	Not Applicable- Leases shown in Figure 3
Detail the cause of the incident/non-compliance	Variation in reporting dates across different leases held by the operation
Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance	Compliance Report has been submitted for relevant leases
Detail action that has been, or will be, taken to prevent recurrence of the incident/ non-compliance	On the 11 th of December 2015, Springvale submitted to DRE a request to align the compliance reporting across leases which cover the operation

The following tables summaries EPL3607 non-compliances during the reporting period as relevant to SSD5594.

Table 20. EC Exceedance LDP009

Nature of the incident/non-compliance	Electrical Conductivity (EC) exceedance at LDP009
Date of incident/ non-compliance (if known; if not known state not known)	27/01/15 1310µS/cm 06/01/15 1250µS/cm 13/01/15 1229µS/cm 20/01/15 1290µS/cm 10/02/2015 1240µS/cm 17/02/2015 1270µS/cm 3/11/2015 1204µS/cm 10/11/15 1205µS/cm 17/11/15 1246µS/cm 24/11/15 1275µS/cm 1/12/2015 1218µS/cm 8/12/2015 1232µS/cm 15/12/2015 1220µS/cm 22/12/2015 1305µS/cm 29/12/2015 1288µS/cm
The location of the incident/ non-compliance (include a figure if appropriate), if known	Centennials Springvale Water Transfer System bypass point east of Kerosene Vale Ash Dam.
Detail the cause of the incident/non-compliance	Increased exposure of mine water make with goaf material
Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance	Various specialist assessments have been undertaken as part of the Springvale mine extension project which conclude that there are no adverse impacts from elevated EC levels.
Detail action that has been, or will be, taken to prevent recurrence of the incident/ non-compliance	Centennial is currently undertaking a holistic review of water management activities within the western Region with the objective of meeting the agreed requirements of the Springvale mine Extension Project. The Cox River Action Plan will be prepared by the 30th of June 2016 in accordance with the Springvale Mine.

Table 21. Arsenic Exceedance LDP009

Nature of the incident/non-compliance	Arsenic Exceedance at LDP009
Date of incident/ non-compliance (if known; if not known state not known)	13/01/15 0.026mg/L
The location of the incident/ non-compliance (include a figure if appropriate), if known	Centennials Springvale Water Transfer System bypass point east of Kerosene Vale Ash Dam.
Detail the cause of the incident/non-compliance	Mobilisation of naturally occurring minerals within the geological sequence as a result of goaf water storage and subsequent dewatering of the mine
Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance	Ferric chloride water treatment system has been installed at the Bore 940 site for the removal of soluble arsenic.
Detail action that has been, or will be, taken to prevent recurrence of the incident/ non-compliance	Centennial is currently undertaking a holistic review of water management activities within the western Region with the objective of meeting the agreed requirements of the Springvale mine Extension Project. The Cox River Action Plan will be prepared by the 30th of June 2016 in accordance with the Springvale Mine.

Table 22. Copper Exceedance LDP009

Nature of the incident/non-compliance	Copper Exceedance at LDP009
Date of incident/ non-compliance (if known; if not known state not known)	25/02/15 0.014mg/L
The location of the incident/ non-compliance (include a figure if appropriate), if known	Centennials Springvale Water Transfer System bypass point east of Kerosene Vale Ash Dam.
Detail the cause of the incident/non-compliance	Mobilisation of naturally occurring minerals within the geological sequence as a result of goaf water storage and subsequent dewatering of the mine
Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance	An investigation was undertaken into the source of water contributing to the discharge point which caused elevated level of copper to be detected at the discharge point. The rates of extraction were subsequently modified to achieve compliance with the prescribed criteria.
Detail action that has been, or will be, taken to prevent recurrence of the incident/ non-compliance	Centennial is currently undertaking a holistic review of water management activities within the western Region with the objective of meeting the agreed requirements of the Springvale mine Extension Project. The Cox River Action Plan will be prepared by the 30th of June 2016 in accordance with the Springvale Mine.

Table 23. Summary of Reportable Incidents and Regulatory Actions

Compliance Type	Agency	Number	Response
Incidents	Not Required	0	Springvale Colliery in 2015 did not have an incident which caused or threatened material harm and/or exceeds the limits or performance measures/criteria in SSD 5594
Caution Notices	EPA	1	
Warning Letters	EPA	1	
Penalty Notices	Not Required	0	Not Required
Prosecutions	Not Required	0	Not Required

The caution notice was received from the EPA on the 16th of February 2015. The offence was a result of an incident involving a discharge of coal fines on the 12th of September 2014 from licensed discharge point 1 (LDP001) at Springvale Coal mine. The EPA has determined that the incident occurred wither due to a singular effect or combination of the pipe within the drainage channel becoming blocked and/or placement of coal fines on the ROM pad. Mitigation measures undertaken to prevent re-occurrence include more regular inspection of the coal stockpile drainage system by operators and independent contractors, upgrades to crusher dam pumping system, review dam excavation and placement of coal fines in the stockpile area. Clean water from the fire dam was also enclosed in a pipe past the stockpile area.

A formal warning was received on the 10th of February 2015 from the EPA regarding two incidents that occurred on the 2nd and 12th of September 2014 involving discharges of mine water on the Newnes Plateau from the Springvale Delta Water Transfer Scheme (SDWTS) . The EPA determined that the location of the SDWTS is vulnerable to damage by heavy vehicles and roadwork activity. Springvale has installed signed along the SDWTS at vulnerable locations to improve communication of the infrastructure installed.

13.ACTIVITES TO BE COMPLETED IN THE NEXT REPORTING PERIOD

In 2016 the following activities are envisioned to be undertaken be Springvale:

- Completion of the Extraction of Longwall 418.
- Extraction Plan consultation and approval for Longwall 419
- Commencement of Longwall 419
- Preparation and consultation of Management Plans required under SSD 5594
- Approved construction activities e.g. Bore 9
- Independent Audit 2016
- New MOP



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