



IVANHOE COAL PTY LTD LIDSDALE SIDING ANNUAL REVIEW

March 2016



Table 1: Annual Review Title Block

Name of Operation	Lidsdale Siding
Name of Operator	Ivanhoe Coal Pty Ltd
Development Consent/ Project Approval #	Lidsdale Siding Upgrade Project 08-0223
Water License #	10WA116403
Name of Holder of Water License	Ivanhoe Coal Pty Ltd
Annual Review Start Date	1 January 2015
Annual Review End Date	31 January 2015

I, Mick Cairney certify that this audit report is a true and accurate record of the compliance status of Lidsdale Siding for the period 2015 and that I am authorized to make this statement on behalf of Ivanhoe Coal Pty Ltd.

Note:

- a) The Annual Review is an 'environmental audit' for the purposes of \$122B(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.
- b) 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)

Name of Authorised Reporting Officer	Mick Cairney
Title of Authorised Reporting Officer	Executive General Manager Operations
Signature of Authorised Reporting Officer	Mecenny
Date	24.3./6/

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1. STATEMENT OF COMPLIANCE

Table 2: Statement of Compliance

Were all conditions of the relevant approval(s) complied with?

Development consent number 08_0223	No
Environmental Protection Licence	No
10WA116403	Yes

Table 3: Non-Compliances

Relevant Approval	Condition #	Condition summary	Compliance Status	Comment	Section # addressed in Annual Review
DA 08_0223	C2.9	Surrender all existing development consents for the site in accordance with Section 104A of the EP&A Act within 12 months.	Non Compliant	Consultation with the Department of Transport has commenced.	11
DA 08_0223	C3.2	Noise generated by the project does not exceed the project criteria	Non Compliant	Train loading for evening and night periods has resulted in noise exceedances	6
DA 08_0223	C3.17	Surface water discharges comply with EPL 5129	Non Compliant	Single exceedance of oil/grease concentration limit	11
DA 08_0223	C3.30	Within 12 months of the date of this approval, the Proponent shall lodge a rehabilitation bond for the project with the Director-General.	Administrative Non- compliance	Centennial submitted the bond to DPE on the 22 May 2015 and DPE confirmed receipt of the bond on the 25 May 2015.	11
DA 08_0223	SoC-1	Sound power levels from all new plant and equipment will meet the	Non compliant	Sound power levels exceed EIS prediction for the CV01 & CVO2	11

		specified levels as described in		conveyor drives and for the	
		the Noise		operation of	
		Impact		train loading	
		Assessment		bin.	
		prepared by			
		Hatch 2012.			
EPL 5129	L2.1, L2.2	The	Non compliant	Single	11
		concentration		exceedance of	
		of a pollutant		oil/grease	
		discharged		concentration	
		must not exceed		limit	
		the			
		concentration			
		limits within			
		EPL 5129			
EPL 5129	L4.1	Noise generated	Non compliant	Train loading	6
		at the premises		for evening and	
		must not exceed		night periods	
		the noise limits		has resulted in	
		in EPL 5129		noise	
				exceedances	
EPL 5129	M2.2	Air monitoring	Non compliant	E-BAM	11
		requirements		installed	
		PM_{10}		5/02/2015. Late	
				installation due	
				to technical	
				problems with	
				the E-BAM.	

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:	
		 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:	
		 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

Ivanhoe Coal Pty Ltd (Centennial Ivanhoe) operates the Lidsdale Siding Rail Loading Facility, located approximately 12 kilometres northwest from the city of Lithgow, NSW. Lidsdale Siding is situated approximately 150 kilometres west of Sydney adjacent to the township of Wallerawang.

The Lidsdale Siding Upgrade Project Environmental Assessment (EA) was submitted to the Department of Planning and Infrastructure (DP&I), now Department of Planning and Environment (DP&E) in August 2012. The Lidsdale Siding Upgrade Project was approved on 3 May 2013 by the Minister for Planning and Infrastructure, via the Planning Assessment Commission.

The upgrade project at Lidsdale Siding ensures the improvement of operational efficiency and increases its throughput overall capacity to approximately 6.3 million tonnes per annum. The upgraded train loading process is automated by establishing a coal stockpile with underground reclaimers feeding a conveyor leading to a train loading bin. The total stockpile capacity is now approximately 50,000 tonnes. The commissioning of the automated train loading at Lidsdale was a staged process and commissioning commenced on 5 June 2014, continuing until the end of July 2014. During this period there were some trains part loaded and some fully loaded with the new system. From 1 August 2014 all trains were loaded from the new automated system.

This Annual Review relates solely to the reporting period 1 January 2015 to 31 December 2015. This is the third Annual Review prepared for the Lidsdale Siding operation.

Lidsdale Siding contact details

Position	Contact Details
Geoff Rapson, Manager Springvale Coal Services	63559508
Tony Nolan, Environment and Community Coordinator	63559503

3. APPROVALS

Approval/ Title/ Licence/ Permit	Description	Details/Status
Project Approval	08_0223	Approval to carry out coal handling and train loading operations on the site until 31 December 2042.
Environmental Protection Licence	EPL 5129	The licence authorizes the operation of the coal loading facility with a maximum capacity of 5 Mt per annum.
		Memorandum of Lease (4/11/1978).
		Signed between Public Transport Commission of NSW and Austen and Butta Limited.
Lease	Site lease	NSW Rail land, but there is a lease in place between the managers of the site (John Holland Group) and Centennial Ivanhoe. The original lease was signed by the owners of the site (former Department of Public Transport Commission of NSW) and Austen and Butta Limited.
Water Management Act 2000	10WA116403	The water supply bore at Lidsdale Siding was relocated as the existing bore was grouted in 31/10/2014 to address U1.3 of the pollution reduction program requirement in EPL 5129.
Monitoring Bore Licence	10BL605720	Additional water monitoring bores installed at Lidsdale Siding during 2015.

4. OPERATIONS SUMMARY

Table 4: Production Summary

Material	Project Approval Limit	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Next Reporting Period (Forecast)
Saleable product	6.3 Mt	2,555,270	1,539,005	1,570,000

4.1. Other Operations

Table 5: Operations Summary

	Project Approval Limit (08_0223)	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Comment (if applicable)
Hours of operation	24 hour a day, 7 days per week until 31/12/2042	24 hour a day, 7 days per week	24 hour a day, 7 days per week	
Transport (rail)	6.3 million tonne of coal per annum.	2,555,270	1,539,005	
	All coal to be transported by rail	Rail transport only	Rail transport only	
	No more than 7 laden trains leave the site per day	Maximum of 3 trains per day	Maximum of 3 trains per day	
	No more than 5 laden trains leave the site each day when averaged per annum	Average of 2 trains per day	Less than 2 trains per day	

4.2. Next Reporting Period

There is no material change planned for the Lidsdale Siding Coal Loading operation during 2016. The facility will continue to be used for the distribution of coal from the Springvale Colliery to the ports on the NSW Coast via the Main Western Railway line.

5. ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

Table 5: Actions from previous Annual Review

Action Required	Requested By	Action Taken	Where addressed in Annual Review
Summary of Compliance section, information on notification of any incident to the Department	DPE	Notification letters and noise monitoring reports were forwarded to DPE.	Section 5
Monitoring results from the EBAM	DPE	E-BAM Commissioned on the 5/02/2015	Section 6

Noise exceedance notifications to DPE

Location	Start Date and Time	Period	Criterion dB	Lidsdale Siding LAeq,15min dB	Exceedance	DPE Notification
R8	17/03/2015 22:23	Night	40	41	1	18/09/2015
R3	28/04/2015 18:14	Evening	47	49	2	18/09/2015
R3	25/06/2015 19:40	Evening	47	50	3	18/09/2015
R8	25/06/2015 22:58	Night	40	44	4	18/09/2015
R2	26/11/2015 3.36	Night	46	47	1	8/12/2015

Location	Start Date and Time	Period	Criterion dB	Lidsdale Siding LA1,1min dB	Exceedance	DPE Notification
R8	17/02/2015 22:46	Night	45	59	14	2/11/2015
R8	25/06/2015 22:58	Night	45	51	6	2/11/2015
R2	26/11/2015 3.46	Night	49	54	5	8/12/2015
R8	26/11/2015	Night	45	51	6	8/12/2015

6. ENVIRONMENTAL PERFORMANCE

Table 6: Environmental Performance

Aspect	Approval criteria/ EIS prediction	Performance during the reporting period (actual)	Trend/ key management implications	Implemented / proposed management action
Noise	Refer to the noise criteria detailed below.	Exceedance of the noise limits was recorded at the following receiver locations R2, R3, R8, R9, R10, R12 during 2015 Sound power levels exceed EIS prediction for the CV01 & CVO2 conveyor drives and for the operation of train loading bin.	Train loading for evening and night periods has resulted in exceedances at R2, R3, R8, R9, R10, R12	Complete noise modelling of the Lidsdale Siding and Western Coal Services operations. Once this work has been completed, strategies to target key noise areas will be developed and implemented
Air quality	The short term PM ₁₀ limit is 50 µg/m3 at any residence on private land Long term PM ₁₀ limit is 30 µg/m3	PM ₁₀ was only measured on-site during the 2015 period. The long term on-site PM ₁₀	Compliant	The daily frequency of watering unsealed areas will be determined using dust forecast reports.
	at any residence on private land	measurement is 31 µg/m3.		
	Deposited dust limit is 4 g/m2/month at any residence on private land	Dust emissions were below limit at all on-sites except D11.	The anomalous value for D11 was due to the development of storage units that are situated adjacent to the project boundary.	
Biodiversity	Willows within the study area are to be removed along Pipers Flat Creek	Willow removal program is scheduled to commence in 2016.	Willow removal program is scheduled to commence in 2016.	Willow removal program is scheduled to commence in 2016.
				Fauna & flora monitoring is scheduled for the 2016 reporting

		River health monitoring determined all sites recorded diversity values within the range of their respective mean values.	River health monitoring determined all sites recorded diversity values within the range of their respective mean values.	period.
Heritage	There are no historical heritage items or indigenous heritage listed within the project site.	Compliant	Compliant	

Noise Criteria dB(A)

Location	Day LAeq (15min)	Evening LAeq(15 min)	Night LAeq(15 min)	Night LA1(1min)
1Lot 2 Main St, Wallerawang	50	50	50	55
2Black Gold Cabins, Main St Wallerawang	46	46	46	49
3"Killarney"Brays Lane Wallerawang	47	47	47	56
4 Fairview", Brays Lane Wallerawang	43	43	43	54
5 Duncan Street, Lidsdale Wallerawang	46	46	46	57
6 Old Castlereagh Highway Wallerawang	43	43	43	56
7 Royal Hotel, Main St Wallerawang	41	41	41	49
8 Cnr Heel St & Cripps Ave Wallerawang	40	40	40	45
9 Cnr Cripps Ave & Pindari Pl Wallerawang	39	39	39	45
10 Brays Lane South Wallerawang	45	45	45	50
11 Tara" Brays Lane Wallerawang	45	45	45	51
12 Brays Lane Corner Wallerawang	43	43	43	51

7. WATER MANAGEMENT

Table 7: Water Take

Reporting Period 1/07/2014-30/06/2015

License #	Water Sharing Plan, source and management zone (as applicable)	Entitlement	Passive take / inflows	Active pumping	TOTAL
10WA116403		8.5		2.2	2.2

Reporting Period 1/07/2014-30/06/2015

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	High result	Total Discharge
Megaliters per day	Daily during any discharge	14	0	.5	2	7.5

LDP 04 Water Chemistry

Pollutant	Unit of measure	Number of samples required by the licence	Number of samples collected	Lowest sample value	Mean of samples	Highest sample value
Conductivity	μS/cm	6	8	400	543	680
Oil & grease	mg/L	6	8	5	14	37
рН		6	8	6.7	7.2	7.8
total suspended solids	mg/L	6	8	5	22	127

8. REHABILITATION

The rehabilitation and closure objective for the site is to create stable, non-polluting post closure landforms that allow the achievement of the post closure land use. A final rehabilitation and closure plan will be completed at least three years prior to the planned completion of the operations. Lidsdale Siding has approval to carry out coal handling and train loading operations on the site until 31 December 2042.

8.1. Next Reporting Period

The willow removal within the identified management area is scheduled to commence in 2016. All Salix (Willow) species in Australia (except S. babylonica, S. reichardtii and S. x calodendron) are declared Class 5 noxious weeds under the Noxious Weeds Act 1993. Although Willow trees are known to stabilize stream banks, these large trees outcompete and replace native species that would provide the same stability and add to the natural values of the surrounding environment.

Table 8: Rehabilitation Status

Mine Area Type	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Next Reporting Period (Forecast)	
	Year X-1 (ha)	Year X (ha)	Year X+1 (ha)	
A. Total mine footprint	108	108	108	
B. Total active disturbance ²	17	17	17	
C. Land being prepared for rehabilitation ³	0	0	0	
D. Land under active rehabilitation ⁴	2.1	2.1	2.1	
E. Completed rehabilitation ⁵	0	0	0	

Note – The increase in the footprint area for this reporting period is based on 2015 aerial photography whereas the previous assessment used the 2012 project plans. There has been no additional land disturbance during 2015.

¹ **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.

² **Total Active Disturbance:** includes all areas requiring rehabilitation

³ 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)

⁴ 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)

⁵ **Completed rehabilitation**: requires formal sign off from DRE that the area has successfully net the rehabilitation land use objectives or completion criteria

9. COMMUNITY

There was one complaint at Lidsdale Siding during the Annual Review period, which was the same number as last year. The complaint related to lights at the Lidsdale Siding Train Loading Facility being left on overnight. To prevent a reoccurrence of the event a timer has been installed to switch off the lights after two hours.

A community information line currently exists for Lidsdale Siding to receive calls from the local community. Lidsdale Siding's community information line (63559500) operates 24hours a day, 7 days a week.

The combined western region community consultative committee hosted two meetings during 2015. These meeting's provide a forum for discussion on community complaints and any other issues of interest to the community that relate to the Centennial Group Companies activities in the Lidsdale and Wallerawang area.

10.INDEPENDENT AUDIT

MCW Environmental was engaged by Ivanhoe Coal Pty Ltd to carry out an independent environmental audit of the Lidsdale Siding facility.

	1	1	
Condition Number	Condition	Compliance Status	Status at 31/12/2015
DA 08_0223 C2.9	Within 12 months of the date of this approval, or as otherwise agreed by the Director-General, the Proponent shall surrender all existing development consents for the site in accordance with Section 104A of the EP&A Act.	Not verified	Consultation with the Department of Transport has commenced. The surrender of the consent will be submitted once a signed agreement to surrender the existing consent has been completed.
DA 08_0223 C3.2	The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 1 (condition 2 schedule 3)	Non compliant	The management and mitigation of noise in the Lidsdale/Wallerawang region is an important consideration for Centennial's ongoing operations in the area. A complete and detailed review of the sources of noise, and Centennial's subsequent ability to feasibly and practically manage and mitigate these sources is underway, and a priority for the company.
			Refer to attachment 1 that is a copy of the Centennial Letter to DPE that summaries centennial coals strategy regarding the regional management of noise and identifies the long standing consultation in relation to the management of noise within the

			community and across government agencies.
DA 08_0223 C3.14	Within 6 months of the date of this approval, the Proponent shall upgrade the rail level crossings of Main Street and Brays Lane, Wallerawang, unless the Director-General directs otherwise, by: (a)installing additional signage and line marking on Main Street Wallerawang; (b) installing upgraded safety measures at the Brays Lane level crossing in accordance with the relevant Australian standard.	Not Verified	The required works have been completed. The outstanding correspondence with Council and the rail authority will be followed up and closed out.
DA 08_0223 C3.17	The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.	Non compliant	The preparation of a water management procedure for Lidsdale Siding complex is underway and should be completed by July 2016. The procedure will include best management practices for management of surface water and adoption of quality assurance measures to ensure duplicate samples of all surface water discharge samples are taken.
DA 08_0223 C3.18	Within 6 months of the date of this approval, unless otherwise agreed by the Director-General, the Proponent shall undertake a Phase 2 Contamination Assessment for the site and implement any necessary remediation within 18 months of this approval in accordance with the requirements of the Contaminated Land Management Act 1997, to the satisfaction of the EPA.	Not Verified	The Phase 2 Contaminated Assessment was sent to the EPA on the 9/12/2013. The EPA varied the EPL (5129) on 11 August 2014 to reflect the findings of the phase 2 assessment, and included a pollution studies and reduction program (PRP) on the license. The PRP required the following actions. U1.1 A remediation action plan must be prepared that identifies the most appropriate treatment options for the impacted soils in the vicinity of the former ground fuel storage tank. The remediation action plan was forwarded to the EPA on the 10 November 2014.

material excavated as part of the Lidsdale Rail Siding upgrade project must be characterised prior to reuse on-site or disposal offsite.

A letter report prepared by SLR Consulting on preliminary soil testing of soil/chitter stockpiles at the site was forwarded to the EPA on the 30 September 2014. All samples displayed hydrocarbon levels below the thresholds for 'Areas of ecological significance', 'Urban residential and public open space' and 'Commercial and industrial' land use thresholds, which does not trigger the requirement for further testing.

U1.3 To eliminate the potential for the production bore to act as a conduit for the movement of hydrocarbon contamination between the impacted shallow aquifer and the deeper aquifer, the licensee must seal off the lower part of this production bore. This task must be completed by 30 September 2014.

The production bore has been decommissioned and the pump has been removed. A drilling contractor supervised by RPS technical staff attempted to grout the bore to full depth but failed as loose fill material comprised of cobbles up to 100mm diameter began caving in the hole.

As a result the bore was grouted from the surface to hard rock at approximately 5.5 meters below the surface on the 30 September 2014.

U1.4 A revision of the water management plan must identify the bores to be monitored, the pollutants to be measured, the frequency of monitoring events, an appropriate groundwater assessment criteria to identify what conditions must be met to

result in the cessation of the groundwater monitoring program as it applies to the monitoring of petroleum hydrocarbons at the premises.

The updated water management plan was submitted to the EPA on the 30 September 2014.

Centennial Ivanhoe Pty Ltd has recently requested Environmental Strategies Pty Limited (ES) to undertake an independent review of the Remedial Action Plan (RAP) for the Lidsdale Siding Upgrade Project.

The purpose of the review is to examine ways to expedite compliance with schedule 3 condition 18 of the project approval and U1.1 of EPL 5129 that required the preparation of the RAP. The original RAP and remedial options for the site have been based on NEPC NEPM 1999, and not on NEPM (amended 2013), which requires more rigorous assessment of the site risk prior to remediation.

The original RAP does not address insitu remediation options, with all options currently within the RAP requiring large scale excavation and movement of materials.

As a result it is proposed to undertake the further scope of works prior to commencement of remediation of the site with a view to minimizing the overall environmental risk of the project to the environment and surrounding community.

Implementation of the RAP and commencement of site remediation in 2016 once EPA approval of the updated RAP is received.

DA 08_0223 C3.30	Within 12 months of the date of this approval, the Proponent shall lodge a rehabilitation bond for the project with the Director-General. The sum of the bond shall be calculated in accordance with the current publicly-available version of methodology and calculation spreadsheets utilised by DRE for the purpose of determining rehabilitation liabilities for mine sites, to the satisfaction of the Director-General. The Proponent shall pay the Department's reasonable costs in engaging experts to review the adequacy of the calculated sum of the bond.	Administrative Non- compliance	Centennial submitted the bond to DPE on the 22 May 2015 and DPE confirmed receipt of the bond on the 25 May 2015.
EPL 5129 L2.1	L2.1 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. L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	Non compliant	The water management procedure for Lidsdale Siding complex is being developed and should be finalized by July 2016. The procedure will include best management practices for management of surface water and adoption of quality assurance measures to ensure duplicate samples of all surface water discharge samples are taken.
EPL 5129 L4.1	Noise generated at the premises must not exceed the noise limits presented in the table below.	Non compliant	The management and mitigation of noise in the Lidsdale/Wallerawang region is an important consideration for Ivanhoe Coals ongoing operations in the area. A complete and detailed review of the sources of noise, and Ivanhoe Coal's subsequent ability to feasibly and practically manage and mitigate these sources is underway, and a priority for the company. Refer to attachment 1 that is a copy of the Centennial Letter to DPE that summaries centennial coals strategy regarding the regional management of noise and identifies the long standing consultation in relation to the management of noise within the

			community and across government agencies.
EPL 5129 L4.4	For the purpose of condition L4.3, the meteorological data to be used for determining meteorological conditions is the data recorded by the meteorological weather station identified as EPA identification Point 9 in condition P1.1.	Non compliant	The Springvale Colliery weather station was used during the Lidsdale Siding Upgrade Project. A new weather station was commissioned on the site on the 21 December 2014.
EPL 5129 L4.5	a) With the Leq(15 minute) noise limits in condition L4.1, the noise measurement equipment must be located: i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or ii) within 30 metres of a dwelling façade, but not closer than 3 metres where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises. b) With the LA1(1 minute) noise limits in condition L4.1, the noise measurement equipment must be located within 1 metre of a dwelling façade. c) With the noise limits in condition L4.1, the noise measurement equipment must be located: i) at the most affected point at a location where there is no dwelling at the location; or ii) at the most affected point within an area at a location prescribed by conditions L4.5(a) or L4.5(b).	Not Verified	A statement will be included in future noise monitoring reports regarding compliance with L4.5.
EPL 5129 L4.6	A non-compliance of condition L4.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured: a) at a location other than an area prescribed by conditions L4.5(a) and L4.5(b); and/or b) at a point other than the most affected point at a location.	Not Verified	A statement will be included in future noise monitoring reports regarding compliance with L4.5.
EPL 5129 U1.2	All stockpiled soil and fill material excavated as part of the Lidsdale Rail Siding upgrade project must be characterised prior to reuse on-	Not Verified	Completed. A letter report prepared by SLR Consulting on preliminary soil testing of soil/chitter stockpiles at the site was forwarded to the EPA on

	site or disposal off-site. The characterisation must be undertaken in accordance with the industrial land use criteria summarised in Appendix II of "Guidelines for the NSW Site Auditor Scheme" (DEC, 2006).		the 30 September 2014. All samples displayed hydrocarbon levels below the thresholds for 'Areas of ecological significance', 'Urban residential and public open space' and 'Commercial and industrial' land use thresholds, which does not trigger the requirement for further testing.
SoC-1	Sound power levels from all new plant and equipment will meet the specified levels as described in the Noise Impact Assessment prepared by Hatch 2012.	Non compliant	SWL measurements of the plant and equipment was conducted in late December 2015. The analysis and comparison to the benchmark levels in the Noise Impact Assessment prepared by Hatch 2012 shall be completed by the 1/02/2016.

Independent Noise Audit

The Department of Planning and Environment approved SLR to conduct the independent noise audit of Lidsdale Siding.

Condition Number	Condition	Compliance Status	Status at 31/12/2015
C3.2	Compliance with noise limits as detailed in section 6.	Non compliant	Complete noise modelling of the Lidsdale Siding and Western Coal Services operations. Once this work has been completed, strategies to target key noise areas will be developed and implemented
C3.3	Proponent shall implement additional noise mitigation measures after receiving a written request from locations detailed in table 1 on the approval conditions	Compliant	
C3.4	implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the operational and rail noise generated by the project;	Compliant	
C3.5	Prepare and implement an Independent Noise Audit for the project	Compliant	
C3.6	Prior to the	Non compliant	The noise reporting for

	commencement of construction activities on the site, the Proponent shall prepare (and during construction implement) a Construction Noise Management Plan prepared in accordance with EPA's Interim Construction Noise Guideline 2009 (or any relevant updated version), to the satisfaction of the Director-General.		the construction program did not comply with the construction noise management plan. In future only authorised noise specialist's will be engaged to conduct construction noise monitoring.
C3.7	The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General.	Non compliant	The required sound power level testing of fixed and mobile plant at Lidsdale Siding was not completed prior to the noise audit. The testing commenced in December 2015 and was scheduled for completion in January 2016.
C5.2	The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines.	Compliant	

11.INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD

Complete the following table for <u>each</u> incident and/or non-compliance identified in **Table 2** above.

Table 9: Incident/Non-Compliance Summary

Nature of the incident/non-compliance	08 0223 Condition 3.2	
Nature of the incident/horr-compliance	EPL 5129 L4.1	
	Exceedance of noise limits	
Date of incident/ non-compliance (if known;	R2 26/11/2015	
if not known state not known)	R3 28/04/2015, 25/06/2015,	
	R8 17/02/2015, 17/03/2015, 25/06/2015, 26/11/2015	
	R10 17/02/2015	
	R12 25/06/2015	
The location of the incident/ non-compliance (include a figure if appropriate), if known	Refer to figure 3-1888_NM	
Detail the cause of the incident/non-compliance	The exceedance of noise limits during train loading events using the coal loader.	
Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance	Noise modelling of the Lidsdale Siding and Western Coal Services operation is underway. Once this work has been completed, strategies to target key noise areas will be developed and implemented.	
Detail action that has been, or will be, taken to prevent recurrence of the incident/ non-compliance		
Nature of the incident/non-compliance	DA 08_0223 Condition 3.17	
	EPL 5129 L2.1, L2.2	
	The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits.	
Date of incident/ non-compliance (if known; if not known state not known)	8/01/2015	
The location of the incident/ non-compliance (include a figure if appropriate), if known	LDP04. Refer to figure 3-1888_NM	
Detail the cause of the incident/non-compliance	Results from sample taken on the 8/01/2015 indicated 37 mg/L of oil whereas the limit is 10mg/L. Retesting of the sample was not possible due to insufficient volume remaining for retesting.	

Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance		
Nature of the incident/non-compliance	DA 08_0223 Condition 2.9	
	Surrender of existing development consent within 12 months of the approval.	
Date of incident/ non-compliance (if known; if not known state not known)	1/1/2015 — 31/12/2015	
The location of the incident/ non-compliance (include a figure if appropriate), if known	Refer to figures 3-1888_AQ, 3-1888_NM	
Detail the cause of the incident/non-compliance	Prior to the surrender of the existing consents, consultation and agreement with the landowner is required. The consultation process is underway and the former consents shall be surrendered once landowner agreement has been obtained.	
Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance	As above.	
Nature of the incident/non-compliance	DA 08_0223 Condition 3.30	
	Rehabilitation bond to be in place by the 3 May 2014.	
Date of incident/ non-compliance (if known; if not known state not known)	1/01/2015-22/05/2015	
The location of the incident/ non-compliance (include a figure if appropriate), if known	Refer to figures 3-1888_AQ, 3-1888_NM	
Detail the cause of the incident/non-compliance	Centennial submitted the bond to DPE on the 22 May 2015 and DPE confirmed receipt of the bond on the 25 May 2015.	
Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance	As above	
Nature of the incident/non-compliance	EPL 5129 M2.2	
	PM_{10} results are not available for the full calendar year.	
Date of incident/ non-compliance (if known; if not known state not known)	1/01/2015 to the 4/2/2015	
The location of the incident/ non-compliance (include a figure if appropriate), if known	Refer to attached figure. 3-1888_AQ	
Detail the cause of the incident/non-compliance	The E-BAM monitor was not commissioned until the 5/02/2015. Due to technical problems with the E-BAM it was returned to Poland for reprogramming and software updates.	

Detail action that has been, or will be, taken to mitigate any adverse effects of the incident/ non-compliance

The E-BAM has been operational since the 5/02/2015 commissioning date.

Table 10: Summary of Reportable Incidents and Regulatory Actions

Compliance Type	Agency	Number	Response
Incidents		Nil	
Caution Notices		Nil	
Warning Letters		Nil	
Penalty Notices		Nil	
Prosecutions		Nil	

Note: This table includes actions taken by DPE, DRE and the EPA during the reporting period. Include a summary of actions taken to prevent recurrence of incidents and/or regulatory actions.

12.ACTIVITES TO BE COMPLETED IN THE NEXT REPORTING PERIOD

The following activities will be conducted during the 2016 reporting year.

- Complete an independent review of the Remedial Action Plan (RAP) for the Lidsdale Siding Upgrade Project against NEPM 2013 and update as required.
 Once EPA approval of the RAP has been received implementation of the RAP will commence in 2016.
- Update the flood study for Lidsdale Siding by 1 November 2016.
- The preparation of a water management procedure for Lidsdale Siding complex shall be developed by August 2016. The procedure will include best management practices for management of surface water and adoption of quality assurance measures to ensure duplicate samples of all surface water discharge samples are taken.
- Complete noise modelling of the Lidsdale Siding and Western Coal Services operations. Once this work has been completed, strategies to target key noise areas will be developed and implemented commencing in 2016.
- Commence removal of willows from the identified area within Pipers Flat Creek.

APPENDIX 1 CORRESPONDENCE



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11 November 2015

BY Email

Mr Ben Harrison Acting Director Compliance Department of Planning and Environment G P O Box 39 SYDNEY NSW 2001

Dear Mr Harrison

Western Coal Services (SSD-5579) and Lidsdale Siding (PA 08_0223) Noise

I refer to recent correspondence between the Department of Planning and Environment (DPE), Springvale Coal and Ivanhoe Coal regarding the abovementioned Projects. Specifically, I refer to correspondence dated:

- 20 March 2015 (from the DPE to Springvale Coal Services)
- 23 April 2015 (from Springvale Coal Service to the DPE)
- 1 September 2015 (from Springvale Coal Service to the DPE)
- o 18 September 2015 (from Ivanhoe Coal to the DPE)
- o 29 October 2015 (from Springvale Coal Services to the DPE)
- o 2 November 2015 (from the DPE to Springvale Coal Services)
- 2 November 2015 (from Ivanhoe Coal to the DPE)
- 9 November 2015 (from DPE to Ivanhoe Coal)

This letter provides context to the correspondence to date, summarises Centennial Coal's strategy regarding the regional management of noise, and identifies the long standing consultation undertaken in relation to the management of noise within the community and across government agencies.

Background

Mining and mining related activities have occurred within the greater Lithgow region for over 100 years.

In July 2012, Centennial Coal submitted an Environmental Assessment for the Lidsdale Siding Upgrade Project. This Project was approved by the Planning Assessment Commission in May 2013.

In July 2013, Centennial Coal submitted an Environmental Impact Statement for the Western Coal Services Project. This Project was approved by the Planning Assessment Commission in April 2014.

In March 2014, Centennial Coal submitted an Environmental Impact Statement for the Springvale Mine Extension Project. This Project was approved by the Planning Assessment Commission in September 2015.

In March 2014, Centennial Coal submitted an Environmental Impact Statement for the Angus Place Mine Extension Project. This Project is currently under assessment by the DPE.

In September 2012, Centennial Coal submitted a Briefing Paper seeking Director General's Requirements for a proposed open cut mine, the Neubeck Project, in the vicinity of the Western Coal Services Project and the Lidsdale Siding Project. Revised Director General Requirements were issued for this Project in August 2013. This Project has not been submitted to the DPE for assessment.

In March 2014, Energy Australia ceased operations at the Wallerawang Power Station.

In December 2014, the DPE released the Voluntary Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments.

In September 2015, the Environmental Planning Authority (EPA) released for public comment revised Industrial Noise Guidelines.

The Lithgow City Council Local Environment Plan was approved in 2014 and commenced on the 19 December 2014. This Plan now authorises residential development in areas closer to Centennial's operations. Recent examples include approved developments in and around View Street in Lidsdale.

During the development of the impact assessments for these projects, three (3) separate noise consultants were engaged, resulting in three separate noise models for the region in a policy framework very different to the one that exists today. Whilst clumsy in approach, this method identified a number of key issues that Centennial is working towards addressing. This is detailed below.

Regional Context

These five (5) Projects lie close to the villages of Lidsdale and Wallerawang. Some 300 to 400 residences exist within proximity of these Projects.

In most cases, the same receptors exist for each Project. The result is different noise criteria for each Project at the same receptor. Centennial's operational impacts in the region are not discernible from one another. That is, whilst the noise level experienced at a particular residence might be exceeded, the source of the exceedance is difficult to trace.

The reason for this is a project by project policy environment where criteria are set for a specific receptor and not at the source. Each Project must ensure that the noise generated by the Project does not exceed the criteria at each relevant receptor. This relies on a monitoring regime directed at the receptor and in many cases monitoring the same receptor for different Projects multiple times.

Engagement with the community, through Community Consultative Committees (as per minutes of each meeting) and one on one contacts (as detailed in the relevant EIS/EA for each Project), on these Projects identified deficiencies in this approach that has lead to confusion around which Project is generating the impact and who the community should contact if or when impacted. That is, the community does not distinguish between Lidsdale Siding, Angus Place Colliery, the Springvale Mine and Western Coal Services when experiencing impacts. Centennial's approach is that neither should we. With this in mind, and as agreed with the DPE (reflected in the conditions of approval for each Project), Centennial has adopted a combined CCC in order to better manage information flow between various projects in this region.

Understanding our Environment

In early 2014, Centennial engaged consultants Global Acoustics to commence the development of a regional noise model for operations in the Lidsdale and Wallerawang communities. Early on in the development process, Centennial consulted with relevant noise experts from the DPE and EPA on the proximity of noise generating development and the proposed Neubeck Coal Project, and specifically, an approach to the management of noise in the region.

This approach considered what is now drafted into the Industrial Noise Guideline – the treatment of the Lidsdale/Wallerawang region as a precinct for noise management such that one criterion is set for the region against which all operations are measured. Coupled with this is the need to understand, and implement appropriate actions for, the sources of noise within Centennial's control. Centennial continues to work towards these objectives, as reflected in the conditions of approval for the Projects granted to date which include provision for the development of regional strategies for mitigating impacts such that a precinct type approach could be adopted in the future.

To facilitate the understanding of our environment, Centennial has:

- Installed and commissioned in the Lidsdale area a Noise Compass which provides the most accurate directional noise monitoring for the management of on site activities, such that operations can be modified to respond to potential noise exceedances before they occur
- Commenced the revision of the Western Coal Services Noise Impact Assessment to include an analysis of the contribution by source and by Project to each sensitive receptor
- Commissioned an investigation into noise attenuation controls for fixed plant across all operations. This investigation is ongoing and focusses in the first instance on conveyor systems.

- Fulfilled the commitments outlined in the Lidsdale Siding Upgrade Project, including:
 - o Curved deflector plates fitted to material transfer chutes on conveyor systems
 - Super low noise idlers fitted to new conveyors
 - Conveyor drives designed to achieve the minimum contribution sound level at the receivers, at a minimum to achieve 60dbA at a distance of one (1) metre
 - Steel sheeting installed on the roof and side of the town side of conveyor CV02 to reduce noise emissions to the town side of the site
 - o Steel cladding installed on the conical side of the loading bin to reduce impact noise
 - Noise barrier walls installed from ground level to the underside of the bin loading floor to reduce noise emissions from the drop of coal into the empty wagons
 - A noise procurement specification for the stockpile dozer with a sound power level specification of 105dBA has been included in the contract for management of the site

Whilst Centennial has undertaken stakeholder engagement regarding each of these Projects and the potential amenity impacts (as detailed in each relevant EIS/EA), specific engagement with the community on Centennial's approach to noise management in the region will commence when a clear understanding of the contribution of noise sources is obtained and an appropriate response strategy is developed and implemented. This is to ensure consistency with the requirements of the Voluntary Land Acquisition and Mitigation Policy.

Once completed, Centennial intends to submit modification applications for relevant Projects such that adequate provision is made for noise criteria and consistency in the approach to noise management is achieved.

As identified above, Centennial is working towards an outcome focussed approach to the management and mitigation of noise within the Lidsdale/Wallerawang region. It was acknowledged during the assessment of both the Lidsdale Siding Upgrade Project and the Western Coal Services Project that noise exceedances would likely occur at a number of residents and is attributable to the close proximity of residents to these Projects. Regardless, Centennial has been committed to the management and mitigation of noise in the region for a number of years.

Since 2012, Centennial has undertaken significant one on one engagement with residents and businesses in Wallerawang, Lidsdale and Blackmans Flat on each Project. Each Project includes a detailed Social Impact Assessment detailing the consultation undertaken and the concerns raised.

By way of example, Centennial has undertaken, through the development of the Western Coal Services Project, a detailed mitigation and acquisition program culminating in the acquisition of 13 residential properties in the Blackmans Flat residential area. Planning has commenced for the demolition of these properties. The engagement undertaken with the community was detailed within the Western Coal Services Project Environmental Impact Statement.

Response to Correspondence from DPE

Western Coal Services

Centennial appointed a Group Stakeholder Engagement Manager in July 2015. The duties of this role are to, amongst other things, develop and implement strategies for the engagement of communities within which Centennial operates. The appointed person has been undertaking this role as a consultant on behalf of Centennial's operations since 2012, some of which are detailed above.

The Noise Impact Assessment for the Western Coal Services Project will be updated, as identified above. An application to modify the Western Coal Services Project development consent, and others as required, will be submitted during 2016. This application will be supported by the updated Noise Impact Assessment.

The project schedule outlined in the correspondence of 29 October 2015 relates solely to on site practical and feasible mitigation measures. As identified, the study supporting the identification of these on site mitigation measures is scheduled to be commissioned by 30 December 2015. As mitigation measures are yet to be identified, the implementation timeline should be considered tentative.

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 nor the Department's Assessment Report 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 Reject Emplacement Areas are considered part of the mine's operations and are created throughout the life of a Project, rather than for short periods of intensity as contemplated by the Interim Construction Noise Guideline (2009). Notwithstanding this, Centennial has submitted a Construction Noise Management Plan to the Department, which was approved on 17 August 2015.

Centennial acknowledges the Department's request for monthly compliance reporting on noise. Following the approval of the Springvale Mine Extension Project, Centennial sought from DPE, and obtained, an extension to the provision of a number of plans of management under that approval. The reason for this was to allow sufficient time for the completion of a regional management plan for noise. As part of this regionalisation, Centennial intends to rationalise its noise monitoring program across the Lidsdale/Wallerawang region. By way of example, Centennial currently undertakes 336 monitoring events (attended noise monitoring at a residence, excluding unattended monitoring) per annum in the Lidsdale/Wallerawang region. This plan will cover the monitoring and management of noise under the existing approvals for the Western Coal Services Project, Lidsdale Coal Siding, Springvale Mine and Angus Place Colliery. This plan is due for submission to the DPE for approval by 21 February 2016.

Lidsdale Sidina

As required by the Lidsdale Siding Upgrade Project conditions of approval, Centennial has engaged SLR to undertake an Independent Noise Audit of the commissioned Project. This Audit provides a number of recommendations that Centennial will incorporate into the program of works identified above. The Audit, and associated plan of action, will be provided to the Department by the 30 November 2015.

As noted above, Centennial acknowledges the Department's request for monthly compliance reporting on noise in so far as they relate to Lidsdale Siding.

Conclusion

The management and mitigation of noise in the Lidsdale/Wallerawang region is an important consideration for Centennial's ongoing operations in the area. A complete and detailed review of the sources of noise, and Centennial's subsequent ability to feasibly and practically manage and mitigate these sources, is a priority for the company.

Should you have any enquiries regarding the attached, please contact Paul Williams on 0408 965 145 or at paul.williams@centennialcoal.com.au.

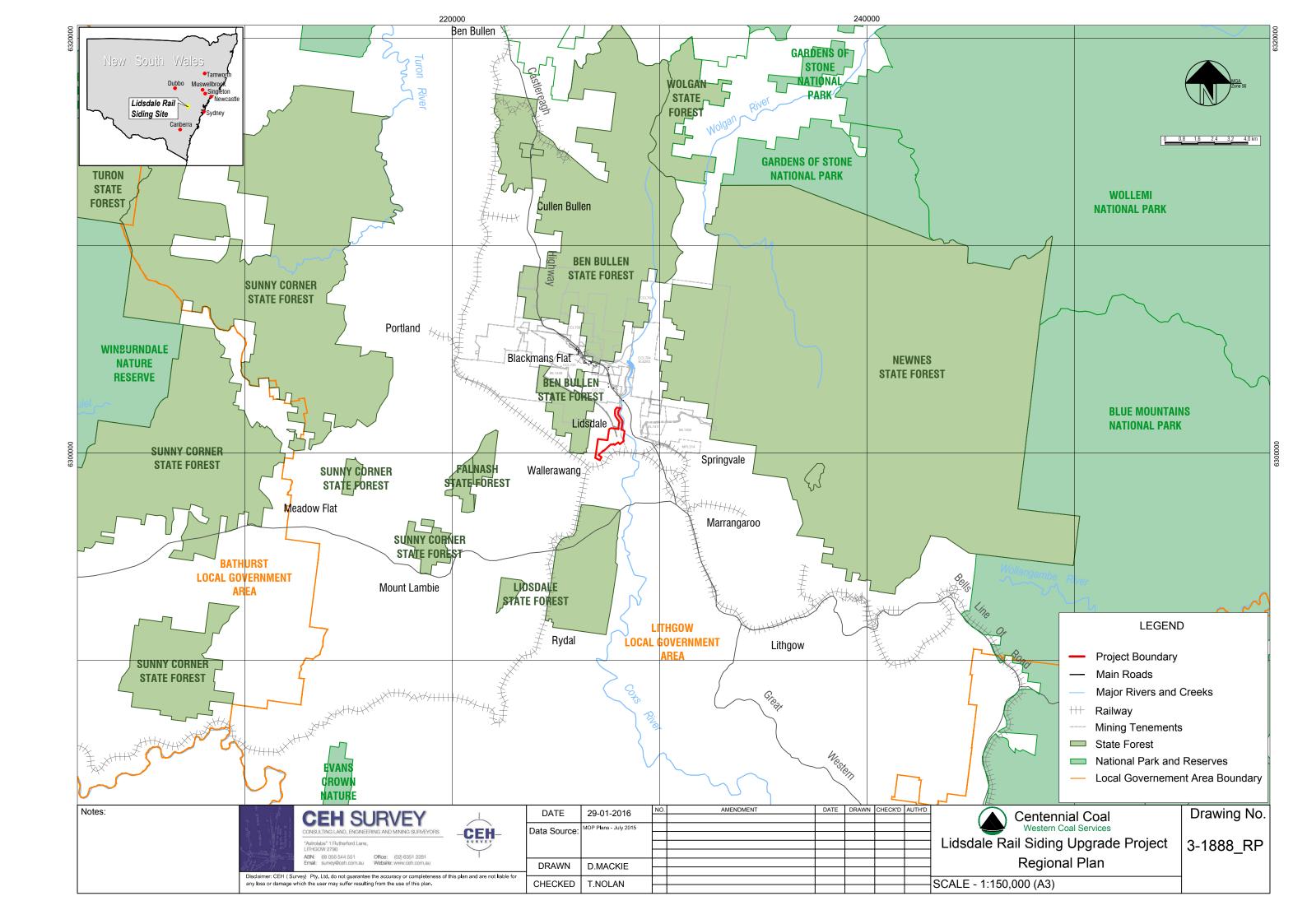
Yours sincerely

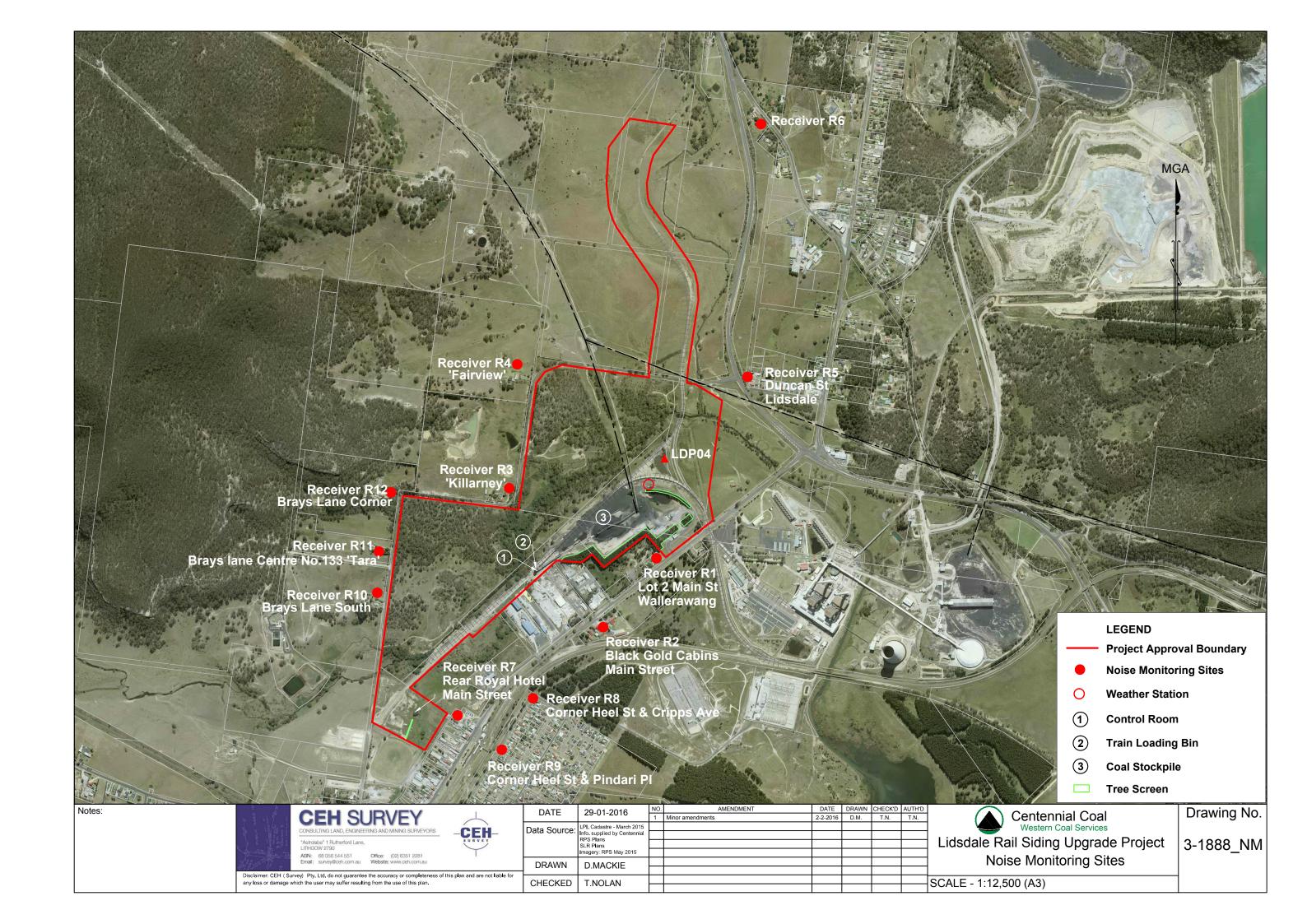
Mary-Anne Crawford

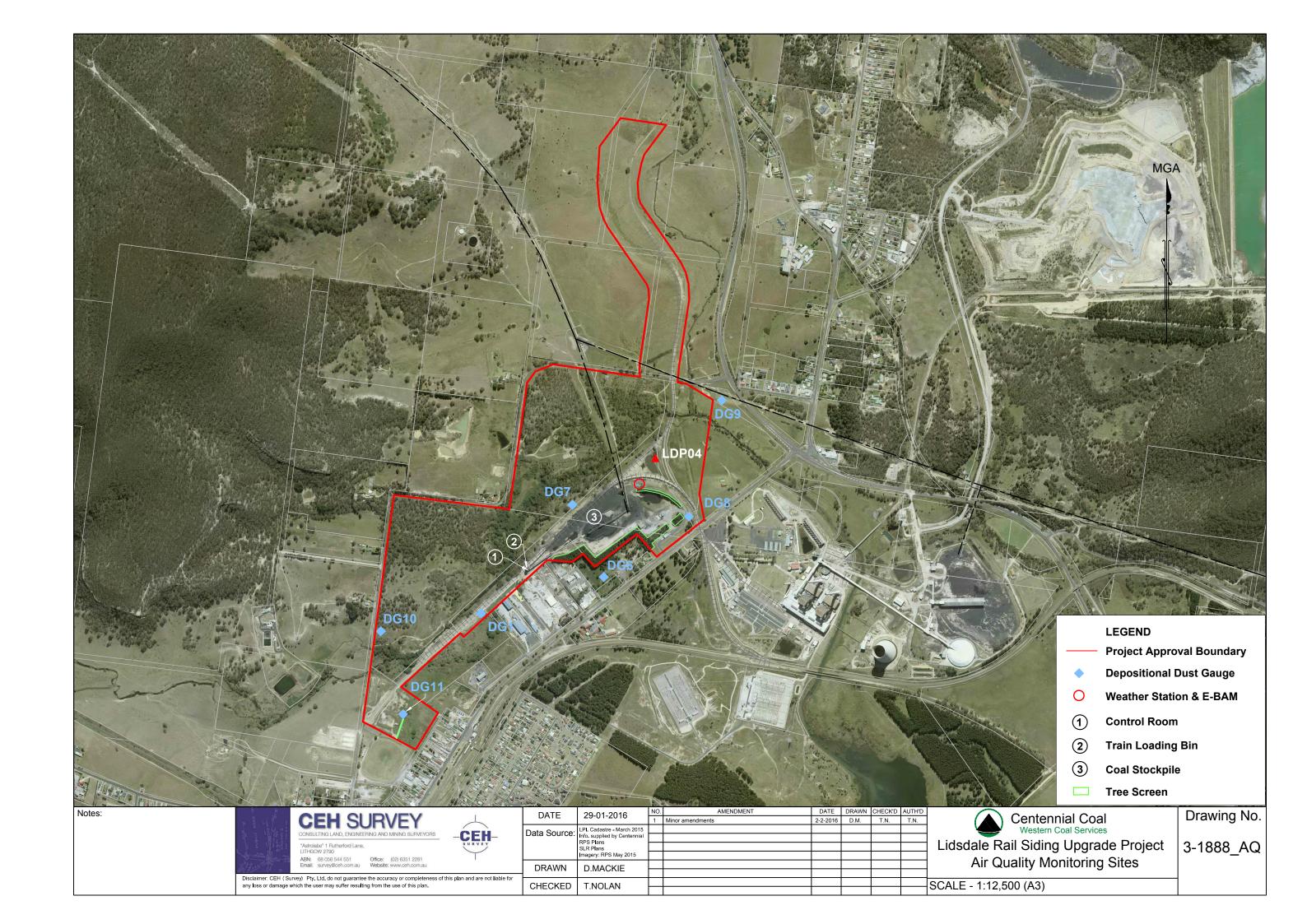
General Manager Environment and Approvals

CC: Oliver Holm, Executive Director, Resource Assessments and Compliance, Department of Planning and Environment.

APPENDIX 2 FIGURES







Centennial Coal

Ivanhoe Coal Pty Ltd Level 18, BT Tower 1 Market Street, Sydney NSW 2000

