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Lidsdale Siding Upgrade Project Independent Noise Audit

Report Number 630.11335-R1

13 November 2015

Centennial Coal Company Limited
PO Box 1002
Wallerawang NSW 2845

Version: Revision 0

Lidsdale Siding Upgrade Project

Independent Noise Audit

PREPARED BY:

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612
10 Kings Road
New Lambton NSW 2305 Australia
(PO Box 447 New Lambton NSW 2305 Australia)
T: +61 2 4037 3200 F: +61 2 4037 3201
newcastleau@slrconsulting.com www.slrconsulting.com

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with the Client. Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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DOCUMENT CONTROL

Reference	Status	Date	Prepared	Checked	Authorised
630.11335-R1	Revision 0	13 November 2015	Nathan Archer	Glenn Thomas	Glenn Thomas

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1 INTRODUCTION

1.1 Overview

Centennial Coal Company Limited (Centennial) has approval to construct and operate the Lidsdale Siding Upgrade Project (LSUP) at Wallerawang NSW, in accordance with Project Approval 08_0223 (PA) dated 3 May 2013. The LSUP is designed to improve the operational efficiency and increase the throughput capacity of the Lidsdale Siding to approximately 6.3 million tonnes per annum (Mtpa). 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 (t). The commissioning of the automated train loading at Lidsdale was a staged process that 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.

1.2 Scope of Work

Centennial has engaged SLR Consulting Australia Pty Ltd (SLR) to undertake an independent noise audit to satisfy the requirements of Schedule 3 Condition 5 of the PA, as follows:

5. *The Proponent shall prepare and implement an Independent Noise Audit for the project to the satisfaction of the Director-General. The audit must:*
- a. *be prepared by a suitably qualified and experienced expert, whose appointment is approved by the Director-General (refer **Section 2.1**);*
 - b. *be prepared in consultation with the EPA, and be submitted to the Director-General for approval within 12 months of completion of the upgrade of the coal loader (refer **Section 2.2**);*
 - c. *incorporate monthly attended noise monitoring results for the project (unless otherwise agreed with the Director-General (refer **Section 6.1**);*
 - d. *investigate and evaluate all reasonable and feasible measures to mitigate operational noise (including on-site rail noise) to ensure compliance with the noise criteria in Table 1 (refer **Section 6.3**);*
 - e. *review the feasibility of reducing the number of night-time train movements to/from the site (refer **Section 8**); and*
 - f. *include an action plan to implement the audit recommendations and a protocol for monitoring the effectiveness of these measures over time (refer **Section 10**).*

It is also noted that Schedule 3 Condition 7 requires that *the effectiveness of the Noise Management Plan is to be reviewed and audited in accordance with the requirements of Condition 5 (refer **Section 9**).*

This Independent Noise Audit report addresses the period from the date the PA was granted (3 May 2013) to 30 May 2015.

2 AUDIT TEAM AND AGENCY CONSULTATION

2.1 Audit Team - Schedule 3 Condition 5(a)

In accordance with the Schedule 3 Condition 5 of the PA, SLR's Independent Noise Audit team, including Nathan Archer (Audit Manager) and Glenn Thomas (Audit Director), received endorsement from the Department of Planning and Environment (DP&E) on 26 May 2015 (refer **Appendix A**).

2.2 Agency Consultation - Schedule 3 Condition 5(b)

In accordance with the Schedule 3 Condition 5 of the PA, Centennial has corresponded with the EPA (refer to Centennial letter *11-6-2015 epa consultation* dated 11 June 2015 **Appendix B**) with regard to noise audit but did not receive any specific comment or requirement in relation to LSUP noise.

3 AUDIT METHODOLOGY

3.1 Audit Methodology

The noise audit methodology consisted of the following key steps:

- Review of all documents provided by Centennial;
- Site inspections and interviews with key Centennial personnel on 11 June 2015;
- Review of additional documentation obtained during the site inspection; and
- Centennial review and comment on the draft audit report.

The Audit Manager was present on site on 11 June 2015. The site visit involved visual inspections of the Lidsdale Siding project site and interviews with key Centennial personnel including Tony Nolan (Environment and Community Coordinator), Anthony Brown (CCP Superintendent) and Graeme Glazebrook (Coal Distribution Manager). Photographs were taken during the site inspections and a large amount of supporting information was viewed (and collected) as part of the noise audit including reports, correspondence, spreadsheets and forms.

4 NOISE AUDIT REFERENCES

4.1 Reference Documents

Reference documents sighted and/or referred to the noise audit report are presented in **Table 1**.

Table 1 Noise Audit Reference Documents

Title	Document	Date	Reference
IMPACT ASSESSMENTS AND APPROVALS			
Lidsdale Siding Upgrade Project Environmental Assessment (EA)	PR110912	31 August 2012	EA
Environmental Noise Impact Assessment for Proposed Lidsdale Siding Upgrade Project	H-33807 Rev 3	14 August 2012	NIA
Traffic & Rail Impact Assessment – Lidsdale Siding Upgrade Project	17621-TL01_1	May 2012	TIA
Lidsdale Siding Upgrade Project Supplementary Report	Supplementary Report	March 2013	EA-SUP
Lidsdale Siding Upgrade Project Project Approval (PA)	PA 08_0223	13 May 2013	PA 08_0223
Environment Protection Licence (EPL)	No 5129	11 August 2014	EPL 5129
MANAGEMENT PLANS			
Lidsdale Siding Upgrade Project Construction Noise Management Plan	610.12398-R1R3	22 May 2013	CNMP
Lidsdale Siding Noise Management Plan	630.10123.02050-R1R2	12 November 2013	NMP
NOISE MONITORING			
Lidsdale Siding Environmental Noise Monitoring – July 2014	14179_R01	4 August 2014	ENM-July14
Lidsdale Siding Environmental Noise Monitoring – August 2014	14180_R01	2 September 2014	ENM-Aug14
Lidsdale Siding Environmental Noise Monitoring – September 2014	14181_R01	30 September 2014	ENM-Sept14
Lidsdale Siding Environmental Noise Monitoring – October 2014	14182_R01	4 November 2014	ENM-Oct14
Lidsdale Siding Environmental Noise Monitoring – November 2014	14184_R01	2 December 2014	ENM-Nov14
Lidsdale Siding Environmental Noise Monitoring – December 2014	14185_R01	6 January 2015	ENM-Dec14
Lidsdale Siding Environmental Noise Monitoring – January 2015	15002_R01	19 February 2015	ENM-Jan15
Lidsdale Siding Environmental Noise Monitoring – February 2015	15052_R01	16 March 2015	ENM-Feb15
Lidsdale Siding Environmental Noise Monitoring – March 2015	15088_R01	20 April 2015	ENM-Mar15
COMPLIANCE			
Lidsdale Siding 2013 Annual Review	2013 Annual Review	6 March 2014	2013-AR
Lidsdale Siding 2014 Annual Review	2014 Annual Review	27 February 2015	2014-AR
Centennial Noise Complaint Register	4/2014/ccapp1000176	11 November 2014	Complaint

5 AUDIT COMPLIANCE

5.1 Compliance Terminology

The terms used in the noise audit to describe the level of compliance of the LSUP with the relevant statutory instruments are presented in **Table 2**.

Table 2 Compliance Terminology

Term	Meaning
Compliance (C)	Adequacy and appropriateness of implementation against current PA/EPL conditions, or compliance Statement of Commitments made.
Non-compliance (NC)	Not in compliance with all or part of the condition.
Observation (O)	A finding which is not likely to significantly affect the operation, which does not strictly relate to the scope of the audit of the compliance and which could lead to performance improvement.
Not Triggered (NT)	The condition was not triggered at the time of the assessment.
Indeterminate (I)	It was not possible to determine compliance or non-compliance.
Not Applicable (NA)	Not applicable.

5.2 Compliance Assessment

Appendix C, D and E provide a detailed review of each of the noise related conditions contained within PA 08_0223, EPL 5129 and the Statement of Commitments (SOC) (as presented in Section 9 of the EA) respectively. **Section 5.3** summarises the identified non-compliances.

5.3 Summary of Non-Compliances

5.3.1 PA Schedule 3 Condition 2 – Noise Impact Assessment Criteria and EPL Condition L4.1 – Noise Limits¹

As reported in the monthly operating noise monitoring reports, seven (7) exceedances of the relevant noise criteria were recorded between July 2014 and March 2015. It is noted that in accordance with Section 11.1.3 of the Industrial Noise Policy (INP) the project is only deemed to be in non-compliance when *"the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition"*. In addition, Section 11.1.3 of the INP states that *"a development will be in breach of a noise consent or licence condition if sustained non-compliances are not addressed and rectified"*.

Based on the above, one (1) non-compliance with the noise criteria was measured in February 2015 when a 14 dB exceedance of the relevant maximum LA1(1minute) criteria was measured at R8.

In accordance with the INP and as stated in Appendix 4 of the PA, the monthly noise monitoring reports assess the noise monitoring results for low frequency noise and apply INP modifying factor penalties as appropriate. Two (2) exceedances of the intrusive LAeq(15minute) noise criteria (including a low frequency penalty) were identified in February 2015. In accordance with the INP, one (1) of these exceedances was a non-compliance being 5 dB above the noise limit at R8.

Noise criteria exceedances and the LSUP noise performance are discussed further in **Section 6**.

¹ The PA noise criteria and EPL noise limits are the same. For consistency noise criteria has been used to refer to both in this noise audit report.

5.3.2 PA Schedule 3 Condition 6 – Construction Noise

As reported in the 2013 and 2014 Annual Reviews, Elton Conveyors completed sound level monitoring at the Lidsdale Siding site during the construction period. Noise monitoring sheets have been sighted; however, no monthly noise monitoring reports have been prepared detailing results, conclusions and recommendations or reporting on compliance (refer CNMP Section 9.2 and 9.3).

It is considered that construction noise monitoring has not been undertaken sufficiently in accordance with the noise monitoring program and the required Australian Standards and that the implementation of the CNMP Section 9 is non-compliant. Noise monitoring reports present no assessment of compliance, conclusions or recommendations and therefore compliance with the construction noise criteria cannot be determined.

5.3.3 PA Schedule 3 Condition 7 and SOC – Noise Management Plan

In accordance with Schedule 3 Condition 7 of the PA and the SOC, a NMP has been prepared for the LSUP and has been approved by the DP&E.

Noise monitoring has generally been undertaken in accordance with the NMP; however, Section 8.2 of the NMP states that:

Within 6 months of commissioning the Project Centennial will arrange for near-field noise measurements to be undertaken on site suitable for determining the operational sound power levels of acoustically significant plant and equipment relevant to the Project. These will be compared to the benchmark levels used in the NIA.

Where measured sound power levels are more than 2 dB above those assumed in the NIA the potential impact at nearby noise sensitive receivers will be investigated and evaluated through the monthly operator attended noise monitoring program, computer noise modelling or a combination of these methods.

The required sound power level (SWL) measurements have not been conducted to date and therefore the implementation of the NMP Section 8.2 is considered non-compliant.

SWL monitoring is also required by the SOC which states:

Use of mobile plant with a specified operating sound power level of 105 dBA; and

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 reference H-338807.

The SWL measurements required to determine compliance with the above commitments have not been conducted to date.

6 LIDSDALE SIDING UPGRADE PROJECT NOISE PERFORMANCE – PA SCHEDULE 3, CONDITION 5(C)

6.1 Monthly Operational Noise Monitoring Results

Centennial has implemented the Lidsdale Siding NMP which includes a noise monitoring program (Section 8 of NMP) and describes best practice noise management including reasonable and feasible mitigation measures to minimise operational and rail traffic noise generated by the project (Section 7 of NMP).

Monthly operational noise monitoring undertaken in accordance with the NMP commenced in July 2014 and has been undertaken by Global Acoustics. The off-site monthly noise monitoring results are summarised in **Table 3** to **Table 6** below.

Table 3 Daytime Lidsdale Siding Intrusive LAeq(15minute) Contributed Noise Level¹ (dBA)

Location	Criteria	July 14	Aug 14	Sept 14	Oct 14	Nov 14	Dec 14	Jan 15	Feb 15	Mar 15
R1	50	<45	<45	41	<40	38	NM	40	34	43
R2	46	<40	IA	43	<42	40	<40	<40	34	44
R3	47	46	48²	35	<35	IA	<40	<35	41	44
R4	43	<35	<40	38	<35	<30	<35	37	<30	35
R5	46	<45	NM	IA	<40	IA	IA	40	IA	IA
R6	43	NM	IA	<35	IA	IA	IA	IA	IA	IA
R7	41	NM	35	<35	IA	IA	IA	IA	34	<30
R8	40	NM	<40	40	IA	IA	IA	<35	40	40
R9	39	IA	IA	<38	IA	IA	IA	IA	35	38
R10	45	NM	<35	<35	<30	IA	IA	IA	<30	38
R11	45	31	39	<35	IA	IA	IA	IA	<30	35
R12	43	34	41	<30	IA	IA	IA	IA	34	36

Note 1 NM – not measurable; IA - inaudible.

Note 2 **≤2 dB exceedance of the relevant PA noise criteria and EPL noise limit.**

Table 4 Evening Lidsdale Siding Intrusive LAeq(15minute) Contributed Noise Level¹ (dBA)

Location	Criteria	July 14	Aug 14	Sept 14	Oct 14	Nov 14	Dec 14	Jan 15	Feb 15	Mar 15
R1	50	39	45	<45	43	33	<30	38	43	43
R2	46	35	45	44	40	37	IA	37	44	44
R3	47	<40	44	43	<40	49²	<30	<35	43	42
R4	43	IA	<35	41	33	43	IA	<35	IA	IA
R5	46	NM	IA	35	<30	IA	IA	IA	35	IA
R6	43	IA	IA	<40	IA	IA	IA	IA	IA	IA
R7	41	IA	<40	<35	IA	NM	<35	37	35	<30
R8	40	IA	IA	42²	38	<35	IA	37	39	36
R9	39	IA	IA	38	33	<35	IA	<35	35	30
R10	45	<35	39	35	IA	38	IA	38	<30	<25
R11	45	<35	39	38	IA	36	IA	<35	<30	IA
R12	43	IA	39	37	IA	41	IA	<30	<30	32

Note 1 NM – not measurable; IA - inaudible.

Note 2 **≤2 dB exceedance of the relevant PA noise criteria and EPL noise limit.**

Table 5 Night-time Lidsdale Siding Intrusive LAeq(15minute) Contributed Noise Level¹ (dBA)

Location	Criteria	July 14	Aug 14	Sept 14	Oct 14	Nov 14	Dec 14	Jan 15	Feb 15	Mar 15
R1	50	<40	40	42	44	39	NM	37	43	41
R2	46	IA	41	41	45	43	IA	40	41	42
R3	47	<40	44	43	42	40	<25	<40	47	41
R4	43	IA	IA	40	38	41	<35	<40	35	40
R5	46	IA	NM	38	IA	IA	IA	<40	IA	IA
R6	43	IA	IA	<40	IA	IA	IA	IA	IA	IA
R7	41	<35	NM	39	<38	39	<35	40	33	30
R8	40	NM	IA	40	41 ²	35	<25	37	40	41 ²
R9	39	NM	<20	39	40 ²	35	<30	<30	33	37
R10	45	<20	40	42	<40	34	<25	<40	41	43
R11	45	IA	IA	39	35	35	<25	32	42	40
R12	43	NM	40	39	35	31	IA	<35	38	35

Note 1 NM – not measurable; IA - inaudible.

Note 2 ≤2 dB exceedance of the relevant PA noise criteria and EPL noise limit.

Table 6 Night-time Lidsdale Siding LA1(1minute) Contributed Noise Level¹ (dBA)

Location	Criteria	July 14	Aug 14	Sept 14	Oct 14	Nov 14	Dec 14	Jan 15	Feb 15	Mar 15
R1	55	<40	41	46	48	42	NM	40	46	45
R2	49	IA	42	49	46	48	IA	47	42	45
R3	56	<40	48	46	45	43	<25	<45	52	43
R4	54	IA	IA	42	40	48	37	<45	40	42
R5	57	IA	NM	42	IA	IA	IA	<50	IA	IA
R6	56	IA	IA	<40	IA	IA	IA	IA	IA	IA
R7	49	35	NM	40	<40	49	35	46	37	30
R8	45	NM	IA	41	44	37	28	44	59 ²	44
R9	45	NM	<20	45	44	37	<30	31	35	39
R10	50	<20	42	45	44	36	<25	44	49	47
R11	51	IA	IA	43	38	37	25	33	47	47
R12	51	NM	43	46	39	38	IA	<40	43	37

Note 1 NM – not measurable; IA - inaudible.

Note 2 >2 dB exceedance of the relevant PA noise criteria and EPL noise limit.

Results of the monthly operator attended noise monitoring can be summarised as follows:

- One (1) exceedance of the daytime intrusive LAeq(15minute) noise criteria measured at location R3 due to loader engine and reverse alarms.
- Two (2) exceedances of the evening intrusive LAeq(15minute) noise criteria, one (1) at R3 and one (1) at R8, due to conveyor noise and train loading.
- Three (3) exceedances of the night-time intrusive LAeq(15minute) noise criteria at R8 (two (2) exceedances) and R9 due to conveyor noise and alarms.
- One (1) exceedance of the night-time maximum LA1(1minute) noise criteria at location R8 due to an on-site alarm.

In accordance with the INP, noise emissions from a development is deemed to be in non-compliance when "the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition". As presented in **Table 3** to **Table 6**, all exceedances of the intrusive LAeq(15minute) noise criteria were not greater than 2 dB and therefore the LSUP is deemed to be compliant with the relevant intrusive LAeq(15minute) noise limits.

The measured exceedance of the night-time maximum LA1(1minute) noise limit was 14 dB above the noise criteria and therefore was deemed to be in non-compliance with the licence condition. Following the interviews with the Environment and Community Officer and Coal Distribution Manager on 11 June 2015, it is noted that cause of the exceedance was investigated and identified to be an on-site alarm which was subsequently removed in response to the exceedance.

In general the following is noted with regard to LSUP noise emissions:

- The NMP is effectively implemented with operator attended noise monitoring conducted in accordance with the noise monitoring program on a monthly basis.
- Noise emissions from the LSUP are generally compliant with the relevant noise criteria at all the nearest residential receiver locations.
- Where a non-compliance has been measured, appropriate investigation and reactive noise management measures were taken to remove the identified source of the non-compliance.

6.2 Recommended Improvements

It is recommended that future noise monitoring reports also include consideration of the LSUP operating log to identify what activities are occurring on-site during the monitoring period. It is understood that currently an average of three (3) trains per day are loaded by the LSUP but that noise monitoring may occur at any time. Identification of periods of noise monitoring coinciding with train loading will allow better tracking of the actual noise performance of the site.

6.3 Noise Complaints

It is understood that one (1) complaint was received by Centennial attributable to the LSUP during the audit period on 17 November 2014 due to an alarm. The complaint was recorded and investigated by Centennial in accordance with the NMP and appropriate remedial action was taken by removing the audible component of the alarm. The complaint record was sighted by SLR's Audit Manager.

7 EVALUATION OF NOISE MANAGEMENT AND MITIGATION MEASURES – SCHEDULE 3 CONDITION 5(D)

7.1 Noise Mitigation and Management Measures

Section 7 of the NMP describes the noise mitigation and management measures which have been incorporated into the design of the project. **Appendix F** provides a detailed review of the noise mitigation measures which have been implemented at the site.

The effectiveness of the noise mitigation practises can be evaluated through the following indicators:

- Comparison of installed SWLs of plant and equipment with the benchmark levels presented in the EA;
- Results of monthly operator-attended noise monitoring; and
- Number of noise-related complaints.

As discussed in **Section 5.3.3**, SWL monitoring has not yet been conducted at the site and as such this cannot be utilised at this stage to evaluate the effectiveness of the noise mitigation. However, as presented in **Section 6.1** and **6.3**, in general the noise management and mitigation measures at the site have resulted in compliance with the relevant noise criteria and an improvement in the noise performance of the site comparison with operations prior to automated-loading.

The practises outlined in the NMP and implemented at the site are considered consistent with “*best available technology economically achievable*” (BATEA) and current best practice principles for minimising noise emissions as outlined in Section 7.5 of the INP.

7.2 Recommended Improvements

Sound Power Level Monitoring

On-site SWL monitoring in accordance with PA Schedule 3 Condition 7(d), the SOC and Section 8.2 of the NMP has not yet been conducted to determine the actual SWLs of the on-site plant and equipment for comparison with the benchmark levels in the EA. It is recommended that this investigation be conducted to evaluate the at source performance of the noise mitigation measures.

Alarm Review

As noted in **Section 6.1** and **Section 6.3**, a number of exceedances of the noise criteria and the noise complaint have been associated with alarm noise emissions from the site. It is recommended that a review of the on-site audible alarms be undertaken to determine their requirement and if levels could be reduced while maintaining health and safety requirements.

Lidsdale Siding Operating Log

While operator attended noise monitoring has shown general compliance with the PA noise criteria and EPL noise limits, monitored noise level are not evaluated against the Lidsdale Siding operating log. Noise monitoring reports should include a summary of the plant and equipment operating at the site during the noise monitoring periods. Where LSUP plant and equipment is not operating it should be highlighted as such.

Consideration of the plant and equipment operating during the monitoring will assist in determining the effectiveness of the noise mitigation and management measures. Noise monitoring undertaken during periods of no train loading does not provide any information as to the effectiveness of the noise mitigation on the site.

8 REVIEW OF NIGHT-TIME RAIL MOVEMENTS - SCHEDULE 3 CONDITION 5(E)

In accordance with Schedule 3 Condition 5(e) of the PA, a review of the feasibility of reducing the number of night-time train movements to/from the site is required as part of this noise audit.

The rail networks utilised by trains servicing LSUP are operated by John Holland Rail (JHR) on behalf of the owner, Transport for NSW (TfNSW) between Wallerawang and Lithgow, and by RailCorp for the rest of the route to Port Kembla. As stated in the Traffic and Rail Impact Assessment (TIA), train paths utilised by Centennial trains are required to avoid peak hour commuter trains.

SLR's Audit Manager interviewed key Centennial personnel including Tony Nolan (Environment and Community Coordinator), Anthony Brown (CCP Superintendent) and Graeme Glazebrook (Coal Distribution Manager) with regard to scheduling of rail movements at the site. Personnel confirmed that Centennial have no control over scheduling of their train movements on the rail network with “scheduled” train movements often being delayed by several hours due operational constraints on the rail network.

9 NOISE MANAGEMENT PLAN REVIEW – SCHEDULE 3 CONDITION 7

It is considered that the NMP is generally being implemented effectively during the monthly operator attended noise monitoring. Notwithstanding this, SLR makes the following recommendations:

- Section 5 of the NMP currently states that EPL 5129 contains no limits with regard to noise. The NMP should be updated to incorporate reference to the EPL 5129 noise conditions contained in Condition L4.
- Operator attended noise monitoring reports should include a summary of the Lidsdale Siding plant and equipment operating during the noise measurements.
- SWL measurements of the plant and equipment should be undertaken and compared to the benchmark levels in the EA in accordance with Section 8.2 of the NMP.
- The Lidsdale Siding weather station should be used for analysing the noise monitoring results in accordance with the EPL or justification should be provided for utilising alternative data.
- Operator attended noise monitoring should continue on a monthly basis.

10 ACTION PLAN – SCHEDULE 3 CONDITION 5 (F)

SLR has determined an appreciable degree of compliance with the PA and EPL. Notwithstanding this, a number of recommendations have been made for improvements. An action plan for the implementation of recommendations is provided in **Table 7**.

Table 7 Action plan to implement the recommendations of the noise audit

Recommendation	Timing
Update NMP to include reference to EPL 5129 noise limits.	TBC
Operator attended noise monitoring to include summary of Lidsdale Siding operations during noise measurements.	Next monthly noise monitoring report.
Utilise Lidsdale Siding weather station for analysing noise monitoring results.	Next monthly noise monitoring report.
SWL measurements of the plant and equipment to be undertaken and compared to the benchmark levels in the EA in accordance with Section 8.2 of the NMP and the SOC	TBC
Undertake a review of on-site alarm systems.	TBC



Planning & Environment

Planning Services Resource Assessments and Compliance

Contact: Margaret Kirton
Phone: (02) 9228 6289
Email: margaret.kirton@planning.nsw.gov.au

Mr Anthony Brown
CPP Superintendent
Centennial Coal Pty Limited
PO Box 198
WALLERAWANG NSW 2845

Dear Mr Brown,


Lidsdale Siding Upgrade Project (SSD 08_0223) Independent Noise Audit

I refer to your letter dated 21 May 2015 advising that Centennial wishes to commission SLR Consulting Australia Pty Limited (SLR) to undertake the Independent Noise Audit required by condition 5 of Schedule 3 of the Lidsdale Siding Upgrade Project Approval.

Please be advised that the Secretary has considered the qualifications and experience of Glenn Thomas and Nathan Archer of SLR and approves their appointment to undertake the Audit.

Should you have any questions about this letter, please contact Margaret Kirton on 9228 6289.

Yours sincerely


Howard Reed *26.5.15*
Director Resource Assessments
as the Secretary's nominee



11 June 2015

NSW Environment Protection Authority
PO Box 1388
Bathurst NSW 2795

Attention: Mr Allan Adams

Dear Allan,

LIDSDALE SIDING UPGRADE PROJECT INDEPENDENT NOISE AUDIT - REQUEST FOR EPA COMMENT

Ivanhoe Coal Pty Ltd was granted approval for the Lidsdale Siding Upgrade Project (LSUP) by the Minister for Planning and Infrastructure on 3 May 2013 (Project Approval [PA] 08_0223). Schedule 3, Condition 5 of the PA requires the preparation of an Independent Noise Audit (noise audit) by a suitably qualified and experienced expert as follows:

Independent Noise Audit

The Proponent shall prepare and implement an Independent Noise Audit for the project to the satisfaction of the Director-General. The audit must:

- a. be prepared by a suitably qualified and experienced expert, whose appointment is approved by the Director-General;*
- b. be prepared in consultation with the EPA, and be submitted to the Director-General for approval within 12 months of completion of the upgrade of the coal loader;*
- c. incorporate monthly attended noise monitoring results for the project (unless otherwise agreed with the Director-General);*
- d. investigate and evaluate all reasonable and feasible measures to mitigate operational noise (including on-site rail noise) to ensure compliance with the noise criteria in Table 1;*
- e. review the feasibility of reducing the number of night-time train movements to/from the site; and*
- f. include an action plan to implement the audit recommendations and a protocol for monitoring the effectiveness of these measures over time.*

SLR Consulting Australia Pty Limited (SLR) has been approved by the Director-General to prepare the noise audit. In accordance with Schedule 3, Condition 5 the noise audit will include:

A site inspection to view the noise mitigation and management measures outlined in the Noise Management Plan (NMP) and to confirm that the Proponent (and any of its agents) has effectively implemented the requirements of the PA, NMP and Statement of Commitments (as outlined in the Environmental Assessment).

A review of the existing noise performance of the site against the requirements of the PA based on results presented in the monthly noise monitoring reports.

An evaluation of the effectiveness of the noise mitigation and management measures implemented at the site and identification of any opportunities for improvement.

Consultation with Centennial and a review of any information that may be currently available relevant to the minimisation of night-time rail movements.

A review of the NMP and associated noise monitoring program (Section 8 of the NMP) and consideration of a protocol for ongoing monitoring of the effectiveness of the noise mitigation measures.

An action plan for the implementation of any recommendations of the audit.

Preparation of an Independent Noise Audit Report documenting the findings and recommendations of the audit.

In accordance with Condition 5b, comment from the EPA is requested in relation to any specific component(s) which require further consideration in the preparation of the noise audit. It would be appreciated if you could provide any comments on or before 19 June 2015 in order for the noise audit to progress in a timely manner. If you do not respond by this time, we will assume that you have no comments in relation to this matter.

If you have any questions or require any additional information relating to the preparation of the audit please do not hesitate to contact me on (02) 6355 9509, mobile 0459 043 313 or via email on tony.nolan@centennialcoal.com.au.

Yours Sincerely



Anthony Brown
CCP Superintendent

Appendix C

Project Approval 08_0223

Proponent Ivanhoe Coal Pty Ltd

Date of Approval: 3 May 2013

Noise Department of Planning and Infrastructure

Condition Number	Condition	Compliance Status (C/NC/O/NT/I/NA)	Evidence	Recommended Action																																																																					
Schedule 3 Environmental Performance Conditions																																																																									
NOISE																																																																									
Noise Impact Assessment Criteria																																																																									
2	<p>The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 1.</p> <p>Table 1: Noise criteria dB(A)</p> <table><tr><th rowspan="2">Location</th><th>Day</th><th>Evening</th><th colspan="2">Night</th></tr><tr><th>L_{Aeq}(15 min)</th><th>L_{Aeq}(15 min)</th><th>L_{Aeq}(15 min)</th><th>L_{A1}(1 min)</th></tr><tr><td>1- Lot 2 Main St, Wallerawang</td><td>50</td><td>50</td><td>50</td><td>55</td></tr><tr><td>2 – Black Gold Cabins, Main St, Wallerawang</td><td>46</td><td>46</td><td>46</td><td>49</td></tr><tr><td>3 – “Killamey”, Brays Lane, Wallerawang</td><td>47</td><td>47</td><td>47</td><td>56</td></tr><tr><td>4 – “Fairview”, Brays Lane, Wallerawang</td><td>43</td><td>43</td><td>43</td><td>54</td></tr><tr><td>5 – Duncan Street, Lidsdale</td><td>46</td><td>46</td><td>46</td><td>57</td></tr><tr><td>6 – Old Castlereagh Highway, Lidsdale</td><td>43</td><td>43</td><td>43</td><td>56</td></tr><tr><td>7 – Royal Hotel, Main St, Wallerawang</td><td>41</td><td>41</td><td>41</td><td>49</td></tr><tr><td>8 – Cnr Heel St & Cripps Ave, Wallerawang</td><td>40</td><td>40</td><td>40</td><td>45</td></tr><tr><td>9 – Cnr Cripps Ave & Pindari Pl, Wallerawang</td><td>39</td><td>39</td><td>39</td><td>45</td></tr><tr><td>10 – Brays Lane South, Wallerawang</td><td>45</td><td>45</td><td>45</td><td>50</td></tr><tr><td>11 – “Tara” Brays Lane, Wallerawang</td><td>45</td><td>45</td><td>45</td><td>51</td></tr><tr><td>12 – Brays Lane Corner, Wallerawang</td><td>43</td><td>43</td><td>43</td><td>51</td></tr></table> <p>Notes:</p> <ul style="list-style-type: none">· To interpret the locations referred to in Table 1, see the figure in Appendix 3;· Criteria applicable to a particular residence are those criteria for the nearest specified location in Table 1; and <p>After the first review of any EPL granted for this project under Section 78 of the POEO Act, nothing in this approval prevents the EPA from imposing stricter noise limits on the operations on site under the EPL.</p> <p>Appendix 4 sets out the meteorological conditions under which these conditions apply and the requirements for evaluating compliance with these criteria.</p> <p>However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Location	Day	Evening	Night		L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)	1- Lot 2 Main St, Wallerawang	50	50	50	55	2 – Black Gold Cabins, Main St, Wallerawang	46	46	46	49	3 – “Killamey”, Brays Lane, Wallerawang	47	47	47	56	4 – “Fairview”, Brays Lane, Wallerawang	43	43	43	54	5 – Duncan Street, Lidsdale	46	46	46	57	6 – Old Castlereagh Highway, Lidsdale	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	NC	<p>Lidsdale Siding Annual Reviews 2013 and 2014.</p> <p>Monthly noise monitoring reports July 2014 to March 2015.</p> <p>As reported in the monthly operating noise monitoring reports, seven (7) exceedances of the relevant noise criteria were recorded between July 2014 and March 2015. It is noted that in accordance with the Industrial Noise Policy (INP) the project is only deemed to be in non-compliance when "the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition".</p> <p>In accordance with the above, one non-compliance with the noise criteria was measured in February 2015 when a 14 dB exceedance of the L1(1min) criteria was measured at R8.</p> <p>In accordance with the INP and as stated in Appendix 4 of the PA, the monthly noise monitoring reports assess the noise monitoring results for INP modifying factors and apply penalties as appropriate. Two (2) exceedances of the noise criteria including a low frequency penalty were identified in February 2015 at R8 (5 dB) and R10 (1 dB). In accordance with the INP, one (1) of these exceedances was a non-compliance being 5 dB above the noise limit at R8.</p>	<p>Incorporate the Lidsdale Siding operations log into the noise monitoring reports to identify operations occurring onsite at the time of the noise measurements. ie identify if trains are being loaded during the measurements.</p> <p>Investigate all non-compliances and exceedances and report to the relevant authorities and residents.</p> <p>Noise exceedances and complaints have been associated with a number of alarm noise emissions. It is recommended that a review of audible alarms be undertaken.</p>
Location	Day		Evening	Night																																																																					
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Additional Noise Mitigation On Request																																																																									
3	<p>Upon receiving a written request from the owner of any residence on land listed as Locations 1-4, 6-7, 10 or 11 in Table 1 (or at an existing residence within 200 m of Location 6 in Table 1), the Proponent shall implement additional noise mitigation measures (such as double glazing, insulation, and/or air conditioning) at the residence in consultation with the owner. These measures must be reasonable and feasible.</p> <p>If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.</p>	C	<p>Interview with the Environment and Community Office indicated that no such requests for mitigation have been received since the automation of coal loading.</p> <p>It is noted that one sensitive receiver was mitigated prior to this approval.</p>	None																																																																					
Operating Conditions																																																																									

4	The Proponent shall: (a) implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the operational and rail noise generated by the project;	C	Noise mitigation and management measures outlined in Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 7 are consistent with the use of best available low noise technology. Monthly noise monitoring has indicated that noise levels are generally compliant with the relevant limits (with the exception of the 2 non-compliances reported above). Noise mitigation measures sighted during site visit on 11 June 2015 are generally consistent with those outlined in the EA and NMP. Interview with Environment and Community Officer, CHP Superintendent and Coal Distribution Manager indicate that noise complaints have decreased since the automation of coal loading with loading times and noise emissions reduced.	None
	(b) regularly assess the results of noise monitoring to ensure compliance with the relevant conditions of this approval; to the satisfaction of the Director-General.	C	Results of the monthly noise monitoring have identified occasional exceedances and non-compliances of the noise criteria. On identification of non compliance and/or complaints, appropriate investigation and action was undertaken. See section 4.1 of 2014 annual review "an alarm system was removed following a noise complaint during the period". In addition, interview with CHP Superindendent and Environment and Community officer indicated that the non-compliance with the LA1(1min) criteria was due to an onsite alarm which was subsequently removed in response to the exceedance.	All non-compliances of the noise criteria in condition 2 should be investigated.
Independent Noise Audit				
5	The Proponent shall prepare and implement an Independent Noise Audit for the project to the satisfaction of the Director-General. The audit must:	C	The subject of this document.	Complete Independent Noise Audit. SLR will consult with the EPA and submitt for approval prior to 1 August 2015 (12 months from completion of full upgrade).
	(a) be prepared by a suitably qualified and experienced expert, whose appointment has been approved by the Director-General;			
	(b) be prepared in consultation with the EPA, and submitted to the Director-General for approval within 12 months of completion of the upgrade to the coal loader;			
	(c) incorporate monthly attended noise monitoring results for the project (unless otherwise agreed by the Director-General);			
	(d) investigate and evaluate all reasonable and feasible measures to mitigate operational noise (including on-site rail noise) to ensure compliance with the nosie criteria in Table 1; and			
	(e) review the feasibility of reducing the number of night-time train movements to/from the site; and			
(f) include an action plan to implement the audit recommendations and a protocol for monitoring the effectiveness of these measures over time.				
Construction Noise				
6	Prior to the 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.	NC	Preparation - Lidsdale Siding Upgrade Project Construction Noise Management Plan dated 22 May 2013 (CNMP). Implementation - As reported in the 2013 and 2014 Annual Reviews Elton conveyors completed sound level monitoring at the Lidsdale Siding site during the construction period. Elton Conveyors are not trained acousticians. S9.1 of the CNMP outline the noise monitoring program, referring to weekly, then monthly monitoring. It is considered that construction noise monitoring has not been undertaken sufficiently in accordance with the noise monitoring program and the required Australian Standards and that the implementation of the CNMP is non-compliant. Noise monitoring reports present no assessment of compliance, conclusions or recommendations.	It is recommended that for future construction projects, Centennial ensure that noise monitoring is undertaken by appropriately qualified acousticians.
Noise Management Plan				
	The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must:	C	Lidsdale Siding Upgrade Project Construction Noise Management Plan dated 22 May 2013 Approval Letter from DP&I dated 15/11/2015 reference 2013-11-15 LS Upgrade Management Plans DoPI approval	None
	(a) be prepared in consultation with EPA, and submitted to the Director-General for approval within 6 months of the date of this approval, unless otherwise agreed by the Director-General;	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 22 May 2013 Approval Letter from DP&I dated 15/11/2015 reference 2013-11-15 LS Upgrade Management Plans DoPI approval	None

7	(b) describe the noise mitigation measures that would be implemented to ensure compliance with the noise criteria in Table 1, including the specific measures that would be implemented to minimise train loading and rail noise generated by the project, including noise associated with: · loading coal onto trains; · braking and accelerating of trains; · train warning horns; and · idling locomotives, particularly during the night;	C	Preparation - Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 7.	None
	(c) outline procedures to manage responses to any complaints or issues raised by the owners of affected residences; and	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 9 outlines the complaint procedures. The 2013 and 2014 Annual Reviews state that no complaints have been received with regard to noise emissions.	All complaints and non-compliances of the noise criteria in condition 2 should be investigated and reported in accordance with section 9 of the NMP.
	(d) include a Noise Monitoring Program that: · incorporates monthly attended noise monitoring to evaluate the performance of the project against the noise criteria in Table 1 (unless otherwise agreed by the Director-General; · includes a protocol for determining exceedances of the relevant conditions of this approval; and · includes a program to monitor the actual sound power levels of the equipment on site, compare it with the benchmark levels used in the EA, and evaluate the effectiveness of any attenuation.	NC	Preparation - Section 8 of The Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, outlines the noise monitoring program as appropriate. Implementation - Monitoring of sound power levels has not been undertaken in accordance with section 8 of the NMP to determine the effectiveness of the noise mitigation measures.	undertake sound power level monitoring and evaluate the effectiveness of the noise mitigation.
	Notes: · It is expected that monthly attended noise monitoring will be required for at least 12 months following the completion of the construction of the upgraded coal loader. After 12 months, the Director-General may agree to reduce the frequency of attended noise monitoring provided the operational noise performance of the project is acceptable. · The effectiveness of the Noise Management Plan is to be reviewed and audited in accordance with the requirements in Schedule 5.	C	The subject of this document. Monthly noise monitoring has been undertaken since July 2014.	None

Schedule 5 ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Management Plan Requirements

2	The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines and include:	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, The NMP has been prepared with reference to relevant guidelines and requirements including the INP and includes the relevant requirements as outlined below.	None
	(a) details of any baseline data;	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 6 details baseline noise data and refers to appropriate baseline data contained in the EA.	None
	(b) a description of: - the relevant statutory requirements (including any relevant approval, licence or lease conditions); - any relevant limits or performance measures/criteria; - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 2 and Section 5 It is noted that the NMP makes reference to EPL 5129 which contains no conditions with regard to noise emissions. This has been superseded by EPL 5217.	Update NMP to include EPL 5217 Noise Criteria
	(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits or performance measures/criteria;	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 7	None
	(d) a program to monitor and report on: - impacts and environmental performance of the project; - effectiveness of any management measures in (c) above;	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 8	None
	(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 9	None
	(f) a protocol for managing and reporting any: - incidents; - complaints; - non-compliances with statutory requirements; - exceedances of the impact assessment criteria and/or performance criteria; and	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 9.	None
	(g) a protocol for periodic review of the plan.	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 10	Review the NMP following the outcomes of this audit

Condition Number	Condition	Compliance Status (C/NC/O/NT/I/NA)	Evidence	Recommended Action																																																																						
L4 Noise limits																																																																										
L4.1	<p>Noise generated from the premises must not exceed the noise limits in the table below.</p> <table><tr><th>Location</th><th>Day</th><th>Evening</th><th>Night</th><th>Night</th></tr><tr><td></td><td>L_{Aeq}(15 minute)</td><td>L_{Aeq}(15 minute)</td><td>L_{Aeq}(15 minute)</td><td>L_{A1}(1 minute)</td></tr><tr><td>1. Lot 2 Main St, Wallerawang</td><td>50</td><td>50</td><td>50</td><td>55</td></tr><tr><td>2. Black Gold Cabins, Main St Wallerawang</td><td>46</td><td>46</td><td>46</td><td>49</td></tr><tr><td>3. "Killarney", Brays Lane, Wallerawang</td><td>47</td><td>47</td><td>47</td><td>56</td></tr><tr><td>4. "Fairview", Brays Lane, Wallerawang</td><td>43</td><td>43</td><td>43</td><td>54</td></tr><tr><td>5. Duncan Street, Lidsdale</td><td>46</td><td>46</td><td>46</td><td>57</td></tr><tr><td>6. Old Castlereagh Highway, Lidsdale</td><td>43</td><td>43</td><td>43</td><td>56</td></tr><tr><td>7. Royal Hotel, Main St, Wallerawang</td><td>41</td><td>41</td><td>41</td><td>49</td></tr><tr><td>8. Corner Heel St & Cripps Ave, Wallerawang</td><td>40</td><td>40</td><td>40</td><td>45</td></tr><tr><td>9. Corner of Cripps Ave & Pindari Place, Wallerawang</td><td>39</td><td>39</td><td>39</td><td>45</td></tr><tr><td>10. Brays Lane South, Wallerawang</td><td>45</td><td>45</td><td>45</td><td>50</td></tr><tr><td>11. "Tara", Brays Lane, Wallerawang</td><td>45</td><td>45</td><td>45</td><td>51</td></tr><tr><td>12. Brays Lane Corner, Wallerawang</td><td>43</td><td>43</td><td>43</td><td>51</td></tr></table> <p>Note: The above noise limits do not apply at properties where the licensee has a written agreement with the landowner to exceed the noise limits.</p>	Location	Day	Evening	Night	Night		L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{A1} (1 minute)	1. Lot 2 Main St, Wallerawang	50	50	50	55	2. Black 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	46	46	46	57	6. Old Castlereagh Highway, Lidsdale	43	43	43	56	7. Royal Hotel, Main St, Wallerawang	41	41	41	49	8. Corner Heel St & Cripps Ave, Wallerawang	40	40	40	45	9. Corner of Cripps Ave & Pindari Place, 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	NC	<p>Lidsdale Siding Annual Reviews 2013 and 2014. Monthly noise monitoring reports July 2014 to March 2015.</p> <p>As reported in the monthly operating noise monitoring reports, seven (7) exceedances of the relevant noise criteria were recorded between July 2014 and March 2015. It is noted that in accordance with the Industrial Noise Policy (INP) the project is only deemed to be in non-compliance when "the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition".</p> <p>In accordance with the above, one non-compliance with the noise criteria was measured in February 2015 when a 14 dB exceedance of the L1(1min) criteria was measured at R8.</p> <p>In accordance with the INP and as stated in Appendix 4 of the PA, the monthly noise monitoring reports assess the noise monitoring results for INP modifying factors and apply penalties as appropriate. Two (2) exceedences of the noise criteria including a low frequency penalty were identified in February 2015 at R8 (5 dB) and R10 (1 dB). In accordance with the INP, one (1) of these exceedances was a non-compliance being 5 dB above the noise limit at R8.</p>	Update NMP to include EPL 5129 Noise Criteria
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L4.2	<p>For the purpose of condition L4.1</p> <ul style="list-style-type: none">- Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public Holidays- Evening is defined as the period 6pm to 10pm.- Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public Holidays.	C	<p>Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013 Section 8.3 (noise monitoring during INP defined periods) and monthly noise monitoring reports July 2014 to March 2015.</p>	None																																																																						
L4.3	<p>The noise limits set out in condition L4.1 apply under all meteorological conditions except for the following:</p> <ul style="list-style-type: none">a) Periods of rain or hail;b) Average wind speeds at microphone height exceeds 5 metres/second;c) Wind speeds greater than 3 metres/second at 10 metres above ground level; orc) Temperature inversion conditions greater than 3°C/100m.	C	<p>Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 8.1 and monthly noise monitoring reports July 2014 to March 2015.</p> <p>Noise monitoring results are analysed in accordance with weather data monitored by the operator at the monitoring location as well as with consideration to the Springvale Colliery weather station.</p>	Utilise Lidsdale Siding weather station data for the purpose of analysing noise monitoring results.																																																																						
L4.4	<p>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</p>	NC	<p>With the exception of the May 2015 report, noise monitoring reports state that meteorological data is obtained from the nearby Springvale Colliery weather station.</p>	Utilise Lidsdale Siding weather station data for the purpose of analysing noise monitoring results or provide justification for why an alternative weather station is used (ie Lidsdale Siding weather station out of order)																																																																						

L4.5	<p>To determine compliance:</p> <p>a) with the Leq(15 minute) noise limits in condition L4.1, the noise measurement equipment must be located:</p> <p>i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or</p> <p>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;</p> <p>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.</p> <p>c) with the noise limits in condition L4.1, the noise measurement equipment must be located:</p> <p>i) at the most affected point at a location where there is no dwelling at the location; or</p> <p>ii) at the most affected point within an area at a location prescribed by conditions L4.5 (a) or L4.5(b).</p> <p><i>Note: A non-compliance of the Noise Limits table will still occur where noise generated from the premises in excess of the appropriate limit is measured:</i></p> <p><i>i) at a location other than an area prescribed in part (a) and part (b); and/or</i></p> <p><i>ii) at a point other than the most affected point at a location.</i></p> <p><i>A non-compliance of condition L4.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured:</i></p> <p><i>a) at a location other than an area prescribed by conditions L4.5(a) and L4.5(b); and/or</i></p> <p><i>b) at a point other than the most affected point at a location.</i></p>	C	<p>Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 8.1 and monthly noise monitoring reports July 2014 to March 2015.</p> <p>Noise monitoring is undertaken at the noise monitoring locations shown in appendix B of the NMP. These locations are in general accordance with this condition, however to minimise disturbance to residents, L1,1min noise levels are measured at the same location as the general operational noise levels and not at a distance of 1m from the building facade. It is considered that there would be very little (if any) variation in the mine related L1,1min noise levels measured at the 2 locations. Noise monitoring locations are considered appropriate.</p>	None
L4.7	For the purpose of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.	C	<p>Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013, Section 8.3 and monthly noise monitoring reports July 2014 to March 2015.</p>	None

Appendix E
EA Statement of Commitments

Issue	Action	Timing	Compliance Status (C/NC/O/NT//NA)	Evidence	Recommended Action
Noise					
Noise and Vibration	A Construction Noise Management Plan will be prepared as part of the CEMP	Prior to construction	C	Lidsdale Siding Upgrade Project Construction Noise Management Plan dated 22 May 2013	None
	Use of mobile plant with a specified operating sound power level of 105 dBA	Operation	NC	SWL measurements of mobile plant has not been conducted. It is noted that moblie plant is currently not utilised due to the automation of train loading	undertake sound power level monitoring .
	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 reference H-338807.	Operation	NC	SWL measurements not undertaken	undertake sound power level monitoring
	A Noise Management Plan will be prepared for the ongoing operation and will include recommended mitigation strategies and ongoing montoring as described in the EA to ensure noise objectives are being achieved.	Operation	C	Lidsdale Siding Upgrade Project Noise Management Plan dated 12 November 2013	None

Appendix F

Noise Mitigation and Management Measures - From Section 7 of NMP

Mitigation Measure	Implemented (Y/N)	Evidence	Recommended Action
Transfer chutes on conveyor systems will be provided with curved deflector plates, made of dampened steel, to reduce noise from impact of coal.	Y	Sighted on 11 June 2015 and confirmed during interview	Undertake SWL measurements to compare actual installed SWLs to the benchmark levels in the EA in accordance with Section 8.2 of the NMP.
Conveyors will be fitted with super lownoise idlers.	Y	Sighted on 11 June 2015 and confirmed during interview	
Conveyor drives will have specified sound levels (refer Table 5). CV01 drive will be fitted with partial enclosures (or shrouds) to achieve noise emission levels of 60 dBA at a distance of 1 m.	N	No partial enclosures sighted. SWL measurements have not been sighted to determine if noise emissions meet 60 dBA at 1m.	
Conveyor CV01 will be covered on the eastern side.	Y	Sighted on 11 June 2015 and confirmed during interview	
Conveyor CV02 will have a roof and side panels on the eastern side made from “Hushclad” steel sheeting.	Y	Sighted on 11 June 2015 and confirmed during interview	
The loading bin (a batchweigh system provided by Kanawha Scales and Systems) will have steel cladding along the conical sides of the bin to reduce noise associated with impact of coal.	Y	Sighted on 11 June 2015 and confirmed during interview	
Noise barriers from ground level to the underside of the bin loading floor will be constructed on both sides of the train.	Y	Sighted on 11 June 2015 and confirmed during interview	
The arrangement of the rail track will be such that the train is loaded while travelling up a slight incline to the south. Loading will occur by pushing loaded wagons up a 0.5% grade.	Y	Confirmed during interview	
The stockpile dozer has a specified sound power level of no greater than 105 dBA.	N	Measurements have not been sighted to determine if SWL meets specified level	
The coal bin will be operated such that it will not be empty before being refilled to minimise noise emission from coal falling into an empty bin and impacting on the lower metal conical section.	Y	Confirmed during interview	
A training program will be undertaken with the relevant train operators for all drivers attending the Project site.	Y	It is understood that appropriate training is part of the interface agreement with the rail service providers who are contracted to centennial.	
If a locomotive is positioned at the southern end of the site it will not operate while on the Project site. Rather, the locomotives positioned at the northern end of the train will push the wagons while loading is occurring.	Y	During the interview it was confirmed that rail loading is continuous and locomotives at the southern end of the trains do not operate during rail loading.	