

DONALDSON COAL MINE AND ABEL UNDERGROUND COAL MINE

NOISE MANAGEMENT PLAN CARE AND MAINTENANCE

Version 5

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1	19.09.2000	Original	Original Noise Management for Donaldson Coal Mine	Richard Heggie Associates
2	05.12.2007	All	Integrated Noise Management Plan for Donaldson, Abel Tasman Mines and the Bloomfield CHPP	Heggies Pty Ltd
3	27.05.2008	All	Noise management impacts specific to the Abel Coal Mine.	Heggies Pty Ltd
4	12.08.2014	All	Review and update plan to incorporate Abel MOD3 noise impacts.	SLR Consulting
5	03.06.2019	All	New plan that cover noise management for both Donaldson and Abel Mines for Care and Maintenance phase.	Donaldson Coal
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1. INTRODUCTION

1.1 Background

The Abel underground coal mine and Donaldson open cut coal mines are located in close proximity to each other and are currently managed as an amalgamated mining complex. Donaldson has ceased operations whilst Abel is in 'care and maintenance' with restricted activities occurring across the mining complex. Activities that currently occur include water management, maintenance of rehabilitation, land management, maintenance of mining infrastructure and environmental monitoring activities.

This Noise Management Plan (NMP) serves to meet the requirements of both the Donaldson Development Consent and the Abel Project Approval. It is applicable whilst Abel is in care and maintenance and Donaldson in mine closure. A review and update to this NMP will be undertaken prior to mining operations recommencing at Abel.

Due to the reduction in noise generating activities at both Donaldson and Abel, noise monitoring during care and maintenance will be reduced to reflect the current state of operation.

2. PROJECT LOCATION AND DESCRIPTION

Donaldson mine and Abel underground mine are located approximately 23km west of Newcastle. Other nearby towns include Beresfield, located 2km north-east, and Maitland located approximately 5km north east. The mines access, entries and primary surface facilities are located off John Renshaw Drive, Blackhill. Donaldson Coal Mine has been rehabilitated whilst the Abel coal mine has been in care and maintenance since 2016.

Both mines now use the Abel surface facilities to operate administrative and care and maintenance activities.

Whilst in care and maintenance, the operation has minimal employees and is staffed 5 days a week on day shift only. Noise generating activities are minimal with personnel only onsite between 7am and 7pm.

The Bloomfield CHPP was assessed under the Abel Coal Mine Project Approval. As a result, noise impacts from the Abel operation were inclusive of the Bloomfield CHPP. As there is no coal generated onsite, the Bloomfield CHPP is no longer utilised by Donaldson Coal. During care and maintenance, the Bloomfield CHPP's noise emissions are managed by the Bloomfield Group.

3. STATUTORY REQUIREMENTS

This Noise Management Plan (NMP) has been compiled to meet the requirements of both the Abel Coal Project Approval (05_0136) and the Donaldson Coal Development Approvals (DA 98/01173 and DA 118/698/22). Both coal mines have a requirement to prepare and implement a management plan that describes how noise emissions will be managed. Both projects also hold separate Environmental Protection Licences that contain noise limits for the operation.

3.1 Abel Coal Mine

The Abel Project Approval 05_0136 was originally granted by the Minister on the 6th June 2007 and subsequently modified on three occasions for the installation of a downcast shaft, upcast shaft and facilities upgrade. This NMP is required under PA 05_0136 in Schedule 4, Condition 6 that states;

Ref	Requirement	Section in this Document
6	<i>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must:</i>	
	a) be prepared in consultation with EPA, and submitted to the Director-General for approval within 6 months of the date of approval of MOD 3;	
	b) describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this approval;	
	c) <i>describe the proposed noise management system in detail; and</i>	
	d) include a monitoring program that: <ul style="list-style-type: none"> · uses attended monitoring to evaluate the compliance of the project against the noise criteria in this approval; · evaluates and reports on: <ul style="list-style-type: none"> - the effectiveness of the on-site noise management system; and - compliance against the noise operating conditions; and · defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents. 	

Table 3.1 Abel Project Approval Noise Management Plan Requirement

3.2 Donaldson Coal Mine

The Donaldson Development Approval DA 98/01173 lodged with Maitland Council and DA 118/698/22 lodged with Cessnock Council was originally granted by the Minister on the 14th October 1999 and subsequently modified on two occasions for an extension of the pit limits and extension to the mine life. This Noise Management Plan is required within the Donaldson Development Consent in Schedule 2, Conditions 38 and 39 that state;

Ref		Section in this Document																										
15	Except as may be expressly provided by a OEH licence under the Protection of the Environment Operations Act 1997, or unless subject to a negotiated agreement in accordance with Condition 23, the Applicant shall ensure that the noise emission from construction or mining operations, when measured or computed at the boundary of any dwelling not owned by the Applicant (or within 30 metres of the dwelling, if the boundary is more than 30 metres from the dwelling), shall not exceed the following noise limits:	Not Applicable. Donaldson Coal mine has ceased all operations.																										
	<table border="1"> <thead> <tr> <th rowspan="2">Location</th> <th colspan="2">LA₁₀(15 minute) noise limits (dB(A))</th> </tr> <tr> <th>Daytime</th> <th>Night time</th> </tr> </thead> <tbody> <tr> <td>Beresfield area (residential)</td> <td>45</td> <td>35</td> </tr> <tr> <td>Steggles Poultry Farm</td> <td>50</td> <td>40</td> </tr> <tr> <td>Ebenezer Park Area</td> <td>46</td> <td>41</td> </tr> <tr> <td>Black Hill Area</td> <td>40</td> <td>38</td> </tr> <tr> <td>Buchanan and Louth Park Area</td> <td>38</td> <td>36</td> </tr> <tr> <td>Ashtonfield Area</td> <td>41</td> <td>35</td> </tr> <tr> <td>Thornton Area</td> <td>48</td> <td>40</td> </tr> </tbody> </table>	Location	LA ₁₀ (15 minute) noise limits (dB(A))		Daytime	Night time	Beresfield area (residential)	45	35	Steggles Poultry Farm	50	40	Ebenezer Park Area	46	41	Black Hill Area	40	38	Buchanan and Louth Park Area	38	36	Ashtonfield Area	41	35	Thornton Area	48	40	
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	<p>Table 2: Noise Limits</p> <p><i>Note: Daytime is 7am to 10pm Monday – Saturday, and 8am to 10pm Sundays and Public Holidays. Nighttime is 10pm to 7am Monday – Saturday, and 10pm to 8am Sundays and Public Holidays.</i></p> <p>The noise limits apply for prevailing meteorological conditions (winds up to 3 m/s), except under conditions of temperature inversions.</p>	
16	<p><i>Prior to 31 October 2005, the Applicant shall prepare a Noise Monitoring Program for the development in consultation with the OEH, and to the satisfaction of the Director-General, which includes a noise monitoring protocol for evaluating compliance with the criteria in condition 15.</i></p>	This Document

Table 3.2 Donaldson Development Consent Noise Management Plan Requirement

4. NOISE EMISSION SOURCES

During Care and Maintenance, activities are restricted to day time hours only (7am -7pm). The major noise emissions from site are the limited underground mine vehicles travelling on the surface, diesel powered water pumps, air compressors at the Abel portal and maintenance activities. There is no coal transport or processing activities during care and maintenance which have historically caused elevated noise emissions at Adel and Donaldson.

The Bloomfield CHPP noise impact assessment was assessed under Project Approval 05_0136. Although Donaldson/Abel no longer use this facility, it continues to be used and managed by Bloomfield Coal. The Bloomfield CHPP is approved to operate 24 hours a day, 7 days a week and is the primary noise source under approved operations throughout care and maintenance.

Background noise in the Donaldson/Abel Mine region include the following major roads and highways:

- John Renshaw Drive.
- The New England Highway.
- M1 (Sydney – Newcastle) Freeway.
- Weakley’s Drive.

Operator-attended noise surveys accompanying the unattended noise monitoring generally note that the noise environment at receiver locations is dominated by road traffic noise as well as other natural noises such as insects and birds.

5. Baseline and Operational Noise Levels

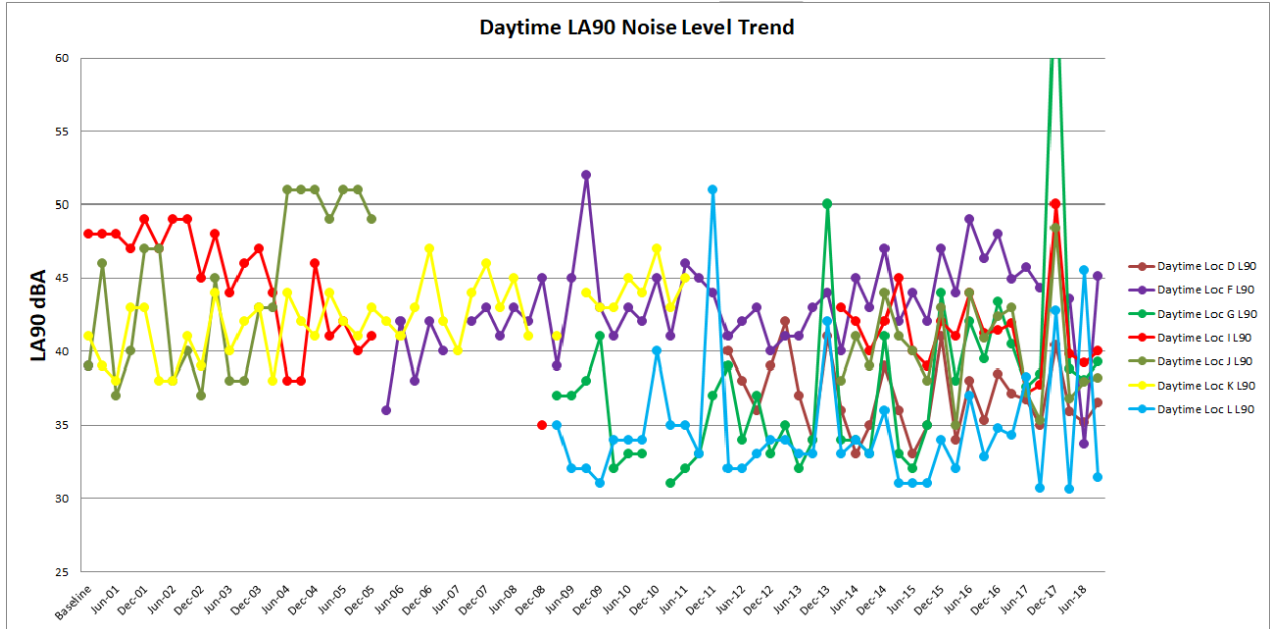
Noise surveys have been conducted to characterise and quantify the acoustic environment in the area surrounding the Abel Underground Mine, Donaldson Coal Mine and Bloomfield Colliery during both operational and care and maintenance phases. Noise surveys were conducted prior to the construction of Abel Underground Mine and the commencement of the Donaldson Open Cut Mine in October 2000.

Following the approval of the Abel Underground Mine in 2007, in accordance with the *Abel Mine Project Noise Monitoring Program* (Heggies, 2007) noise monitoring has been conducted quarterly for the Abel Coal Project from December 2008 to the present. Quarterly noise monitoring of the Donaldson Coal Mine has occurred since 2000.

Graphs showing the daytime, evening and night-time background (LA90) noise levels trends since 2000 are contained in **Figure 5.1**, **Figure 5.2** and **Figure 5.3** respectively. Since Abel Underground Mine noise monitoring commenced in 2008, noise emissions from the mine have been less than the consent conditions at all residential locations and

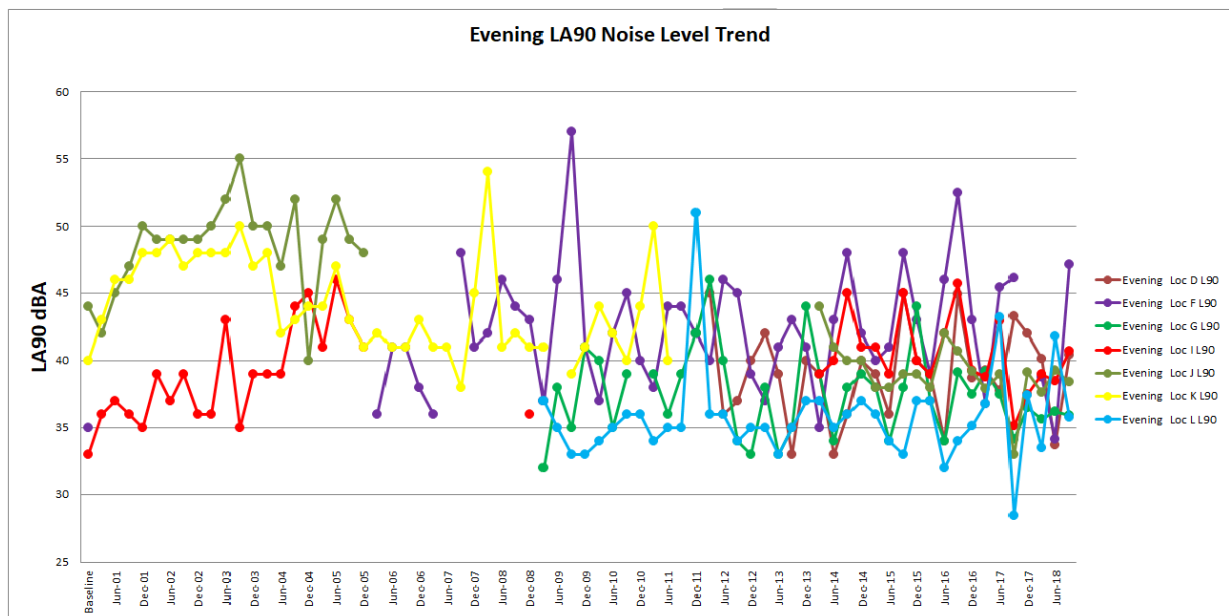
typically inaudible at most monitoring locations. There are no trends within the figures that depict the changes in operations at both the Abel and Donaldson Mines. Seasonal variations are pronounced throughout the evening and night-time figures.

Figure 5.1 Daytime LA90 Trendline



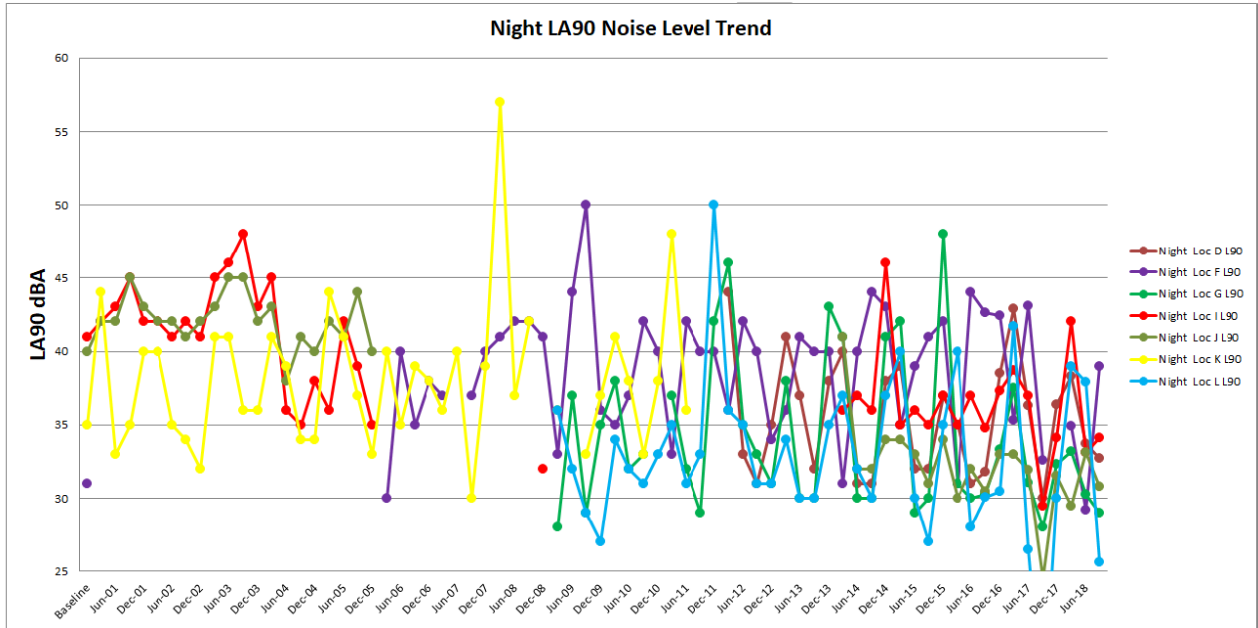
(Source; SLR Q4 2018 Noise Monitoring Report)

Figure 5.2 Evening LA90 Trendline



(Source; SLR Q4 2018 Noise Monitoring Report)

Figure 5.3 Night LA90 Trendline



(Source; SLR Q4 2018 Noise Monitoring Report)

Figure 5.4 Noise Monitoring Locations

(Source: SLR March 2018 Noise Monitoring Report)



6. NOISE MITIGATION MEASURES

In accordance with the requirements of PA 05_0136 and the Abel Underground Mine Statement of Commitments the following mitigation measures have been implemented at the Abel Underground Mine and Bloomfield CHPP:

- Surface equipment used near the portal to the underground mine were fitted with reversing ‘quackers’ rather than beepers. In addition, this equipment is also operated below the Donaldson Open Cut Mine high wall, which mitigates potential noise impacts at the natural surface level.
- The Bloomfield CHPP has had noise screening enclosures fitted to its drives and conveyors to reduce potential noise impacts at residences to the north of the CHPP.
- Water pumps and ventilation fans are regularly maintained to prevent noise emissions.
- Surface equipment being introduced to site during care and maintenance are reviewed for elevated noise emissions.

7. NOISE LIMITS

7.1 Project Approval Conditions

Noise limits are managed to meet the requirements of both the Abel Coal Project Approval (05_0136) and the Donaldson Coal Development Approvals (DA 98/01173 and DA 118/698/22).

The Abel Project Approval (05_0136) sets out the noise limits for the Abel Project. These limits are located in Schedule 4, Conditions 1 to 4.

1. The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 4 at any residence on privately-owned land.

Table 4: Operational noise criteria dB(A)

Location	Receiver Area	Day	Evening	Night	
		$L_{Aeq} (15 \text{ min})$	$L_{Aeq} (15 \text{ min})$	$L_{Aeq} (15 \text{ min})$	$L_{A1} (1 \text{ min})$
Location I	Lord Howe Drive, Ashtonfield	36	36	36	45
Location K	Catholic Diocese Land	37	37	37	45
Location L	Kilshanny Avenue, Ashtonfield	40	40	40	47
All other locations	All other privately-owned residences	35	35	35	45

Notes:

- To interpret the locations referred to Table 4, see the plan in Appendix 3.
- Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy. Appendix 4 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.

However, these noise criteria do not apply if the Proponent has an agreement with the relevant landowner to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

Construction Noise Criteria

2. The Proponent shall ensure that the noise generated during the construction of the downcast ventilation shaft as described in EA (MOD 3) does not exceed the criteria in Table 5.

Table 5: Construction noise criteria dB(A)

Location	Receiver	Day
		$L_{Aeq} (15 \text{ min})$
Location R	281 Lings Road, Buttai	50
Location S	189 Lings Road Buttai	43

Notes:

- The criteria in Table 5 apply only whilst the downcast ventilation shaft is being constructed, and for a maximum of 12 weeks from the commencement of construction.
- To interpret the locations referred to Table 5, see the plan in Appendix 3.
- Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.

However, these noise criteria do not apply if the Proponent has an agreement with the relevant landowner to generate higher construction noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

Rail Noise Criteria

3. The Proponent shall ensure that the noise from rail movements on the Bloomfield Rail Spur does not exceed the limits in Table 6 at any residence on privately-owned land.

Table 6: Rail Spur noise criteria dB(A)

Location	Day	Evening	Night
	$L_{Aeq} (\text{period})$		
All privately-owned land	55	45	40

Cumulative Noise Criteria

4. The Proponent shall implement all reasonable and feasible measures to ensure that the noise generated by the project combined with the noise generated by other mines in the area does not exceed the criteria in Table 7 at any residence on privately-owned land.

Table 7: Cumulative noise criteria dB(A)

Location	Day	Evening	Night
	$L_{Aeq} (\text{period})$		
All privately-owned land	55	45	40

Note: Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy. Appendix 4 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.

The Donaldson Development Consent sets out the noise limits for the Donaldson Project. These limits are located in Schedule 1, Condition 15. As the Donaldson opencut has now closed, there are minimal noise emissions from this project. Condition 15 states;

15. Except as may be expressly provided by a OEH licence under the *Protection of the Environment Operations Act 1997*, or unless subject to a negotiated agreement in accordance with Condition 23, the Applicant shall ensure that the noise emission from construction or mining operations, when measured or computed at the boundary of any dwelling not owned by the Applicant (or within 30 metres of the dwelling, if the boundary is more than 30 metres from the dwelling), shall not exceed the following noise limits:

Location	L _{A10} (15 minute) noise limits (dB(A))	
	Daytime	Night-time
Beresfield area (residential)	45	35
Steggles Poultry Farm	50	40
Ebenezer Park Area	46	41
Black Hill Area	40	38
Buchanan and Louth Park Area	38	36
Ashtonfield Area	41	35
Thornton Area	48	40

Table 2: Noise Limits

Note: Daytime is 7am to 10pm Monday – Saturday, and 8am to 10pm Sundays and Public Holidays. Night-time is 10pm to 7am Monday – Saturday, and 10pm to 8am Sundays and Public Holidays.

The noise limits apply for prevailing meteorological conditions (winds up to 3 m/s), except under conditions of temperature inversions.

7.2 Environmental Protection Licence Conditions

The Abel Environmental Protection Licence (12856), Condition L2 provides the noise limits under the Protection of the Environment Operations Act (1997). Condition L2 states;

L2 Noise limits

- L2.1 Noise generated at the premise must not exceed the noise limits presented in the table below. The noise limits in the table below represent the noise contribution from the premises.

Locality	Day LAeq (15 minute)	Evening LAeq (15 minute)	Night LAeq (15 minute)	Night LA1 (1 minute)
Location A	50	48	41	51
Location B	50	48	41	51
Location J	49	47	40	50
Location L	46	46	40	53
Location I	44	46	38	48
Location C	43	44	38	50
Location G	43	41	36	46
Location H	43	41	36	46
Location K	41	40	37	46
Location D	41	40	37	46
Location E	41	40	36	46
Location F	41	40	36	46

Note: For the purpose of Condition L6.1

Location and Locality - A - Weakleys Dr, Beresfield B -Yarrum Rd, Beresfield C - Phoenix Rd, Black Hill D - Black Hill School E - Brown Rd, Black Hill F - Black Hill rd, Black Hill G - Buchanan Rd, Buchanan H - Mt Vincent Rd, Louth Park I - Lord Howe Dr, Ashtonfield J - Kilarney St, Avalon Estate K - Catholic Diocese (Former Bartter) L - Kilshanny Ave, Ashtonfield.

Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays 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 Sundays and Public Holidays.

These limits do not apply if the licensee has an approved written agreement with the relevant owner/s of these residences to generate higher noise levels.

LAeq means the equivalent continuous noise level - the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.

- L2.2 To determine compliance with the LAeq (15 minute) condition(s) L6.1 noise from the premises must be measured at, or computed for, the most affected point on or within the residential

boundary, or at the most affect point within 30m of the dwelling (rural situations) where the dwelling is more than 30m from the boundary to determine.

Where it can be demonstrated that direct measurement of noise from the premises is impractical, the DECC may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.

The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall be applied to the measured noise levels where applicable.

- L2.3 To determine compliance with the LA1(1minute) condition(s) L6.1 noise from the premises is to be measured at 1m from the dwelling facade.

Where it can be demonstrated that direct measurement of noise from the premises is impractical, the DECC may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.

- L2.4 The noise emission limits identified in condition L6.1 apply under meteorological conditions of:

- Wind speed up to 3m/s at 10 metres above ground level; or
- Temperature inversion conditions of up to 3 degrees celcius/100m and wind speed up to 2m/s at 10 metres above the ground.

The Donaldson Environmental Protection Licence (11080) does not contain any conditions that relate to noise limits.

8. NOISE MONITORING PROGRAM

8.1 8.1 General Requirements

The noise measurement procedures employed throughout the monitoring program are guided by the requirements of AS 1055-1997 "*Acoustics - Description and Measurement of Environmental Noise*", the NSW Industrial Noise Policy and the Noise Policy for Industry (2017).

Whilst in care and maintenance, noise monitoring will be conducted on a six monthly basis and consist of continuous unattended and operator attended noise monitoring.

All acoustic instrumentation employed throughout the monitoring programme will be designed to comply with the requirements of AS IEC 61672.1 – 2004 *Electroacoustics—Sound level meters - Specifications* and carry current NATA or manufacturer calibration certificates.

Instrument calibration will be checked before and after each measurement survey, with the variation in calibrated levels not exceeding ± 0.5 dB(A).

8.2 Key Monitoring Locations

Prior to the change in situation of Donaldson mines, an integrated NMP was used with the monitoring plans for the Abel, Tasman, Donaldson and Bloomfield Mines to provide a single integrated noise monitoring program for all four (4) mines. Since the original integrated NMP, Donaldson Open Cut Mine and Tasman Mine have ceased production and all major earthworks on the site have been finalised whilst Abel mine is in care and maintenance with no mining

operations occurring. Therefore, it is proposed that compliance noise monitoring for the Donaldson Open Cut Mine and Tasman Mine are no longer required and limited monitoring required for the Abel mine.

Given the preceding **Table 8.1** presents the key noise monitoring locations representative of the noise sensitive receivers presented in **Figure 5.4**. Noise monitoring will be conducted at the monitoring locations relevant to current operations.

Receiver Identifier	Receiver Location	Respective Focus Operation
D	Black Hill School, Black Hill	Abel
F	Black Hill Road, Black Hill (owned by Donaldson Coal)	Abel, Bloomfield
G	Buchanan Road Buchanan	Bloomfield
I	Magnetic Dr, Ashtonfield	Abel, Bloomfield CHPP
J	Parish Drive, Thornton	Bloomfield rail operations
L	Kilshanny Avenue, Ashtonfield	Abel, Bloomfield CHPP

Table 8.1 – Noise Monitoring Locations

It is noted that the residences on the Catholic Diocese land (Location K) are uninhabited and as such noise monitoring will not be conducted at this location. Should circumstances change and these locations become inhabited again, the noise monitoring program will be updated accordingly.

8.3 Operator-Attended Noise Surveys

Operator-attended noise measurements will be conducted at locations D, F, G, I, J and L to quantify and characterise the maximum (L_{Amax}), the energy equivalent (L_{Aeq}), and background (L_{A90}) noise levels from ambient noise sources and mining operations over a 15 minute measurement period.

During attended monitoring, digital recordings will be conducted to allow for additional post analysis of the mine contributed $L_{Aeq}(15\text{minute})$, $LA10(15\text{minute})$ and $LA1(1\text{minute})$ noise levels and to assist in source identification.

8.4 Unattended Continuous Noise Logging

In order to supplement the operator-attended measurements, unattended continuous noise monitoring will be conducted at the same locations as the operator attended locations and will be conducted over a period of 7 days six monthly, to quantify overall ambient noise amenity levels resulting from mining, and processing operations and other environmental noise sources.

Data from unattended continuous noise logging will allow trends to be identified in ambient noise levels surrounding the mine and the assessment of cumulative noise impacts from all mining related noise sources in the area.

The monitoring locations have been chosen to be representative of noise emissions from mining operations and coal processing plant to determine compliance with the approval conditions and/ or allow the contributed noise level to be calculated at the nominated assessment locations.

9. INSTRUMENTATION AND MEASUREMENT PARAMETERS

9.1 Operator-Attended Surveys and Unattended Logging

All acoustic instrumentation employed throughout the monitoring programme will be designed to comply with the requirements of AS IEC 61672.1 – 2004 *Electroacoustics—Sound level meters - Specifications* and carry current NATA or manufacturer calibration certificates.

Portable sound level meters used for operator attended noise monitoring will be capable of conducting real time third octave analysis.

Noise loggers will be programmed to continuously record statistical noise level indices in 15 minute intervals which include the L_{Amax}, LA1, LA5, LA10, LA90, LA99, L_{Amin} and the LA_{eq}.

Instrument calibration will be checked before and after each measurement survey, with the variation in calibrated levels not exceeding ±0.5 dBA.

9.2 Meteorological Parameters

All noise measurements will be accompanied by both qualitative description (including cloud cover) and quantitative measurements of prevailing local weather conditions throughout the survey period.

Meteorological measurements will be guided by the requirements of AS 2923-1987 “*Ambient Air- Guide for Measurements of Horizontal Wind for Air Quality Applications*” Environmental Protection Licence 12856. The automatic weather station situated on the Abel mine site is programmed to continuously record the meteorological parameters as shown in **Table 9.1**.

Measured Parameter	Unit	Sample Interval
Mean wind speed	m/s	15 minute
Mean wind direction	Degrees	15 minute
Aggregate rainfall	mm	15 minute
Mean air temperature	C°	15 minute

Table 9.1 Meteorological Measurement Parameters

9.3 Plant and Equipment Observations and Log

During the attended noise measurements, the operator will identify (if possible) any significant mine generated noise sources (ie mobile equipment, pumps, CHPP, etc). In addition, the operator will obtain copies of the relevant fixed plant and mobile equipment operating shift logs and rail loading times to be included in the noise monitoring report.

10. DETERMINING COMPLIANCE

10.1 Operator-attended Noise Survey Results

The LA_{eq}(15minute) noise level contributions from all mining operations as well as the overall ambient noise levels together with the weather and mine operating conditions will be reported on a six monthly basis.

The contributed noise emissions from mining operations will be evaluated and assessed against the noise level criteria given in Section 7. Compliance will be determined by:

- direct measurement of the consent criteria - LA_{eq}(15minute).
- operator estimated LA_{eq}(15minute) contribution.

- operator estimated LA1(1minute) contribution.
- by calculation from near field measurements.
- from post analysis of audio recordings.
- by measurement at a representative location.
- a combination of any or all the above methods.

10.2 Unattended Continuous Noise Logging

The unattended ambient noise logger data from each monitoring location, together with the weather and mine operating conditions will be presented graphically on a daily basis and presented in the noise monitoring report.

It should be noted that the ambient noise levels do not necessarily reflect the contributed level of noise emissions from mining operations. The ambient noise level data quantifies the overall noise level at a given location independent of its source or character. The ambient noise monitoring data will provide indications of the cumulative noise emissions from all industrial noise sources and amenity levels.

Prior to further analysis, the ambient noise level data from each monitoring location which correlate with periods of unstable weather (ie rainfall greater than 0.5 mm or wind speed greater than 5 m/s) will be discarded in accordance with INP data exclusion methodology.

11. REPORTING

11.1 Noise Monitoring Report

All routine monitoring results will be documented and reported on a six monthly basis. This information will also be included in the Annual Review which is sent to the relevant authorities, the Community Consultative Committee and provided on the Donaldson coal website.

Six Monthly reports will consist of the following information:

- Summary of all attended and unattended noise monitoring results.
- Measured/ calculated and/or operator estimated Donaldson/Abel mine LAeq(15minute) contributed noise levels for each monitoring location.
- Measured/ calculated and/or operator estimated Donaldson/Abel mine LA1(1minute) contributed noise levels for each monitoring location.
- Statement of compliance/non-compliance.
- Details of any complaints relating to noise and their state of resolution.

11.2 Reporting Non-Compliances

In the event of a measured exceedance of the relevant noise criteria, the site Environmental and Community Relations Superintendent will be promptly informed of the location, the margin of exceedance and the source of emission, if it has been identified. The noise, weather and plant operating data shall be documented and forwarded to the Environmental and Community Relations Superintendent so that the matter can be investigated and appropriate actions undertaken accordingly.

Additional noise measurement methods such as near field monitoring or unattended directional noise monitoring will be utilised, if applicable, to investigate noise complaints, or to determine compliance with the approval conditions where potential non-compliances have been measured or are difficult to quantify from operator-attended or unattended noise measurements.

If an exceedance of the Project Approvals or EPL has been investigated and deemed to be sourced from Donaldson/Abel, the Department of Planning and Environment and the Environmental Protection Authority will be notified and a summary of the exceedance will be included in the Annual Review.

12. PROTOCOL FOR MANAGING COMPLAINTS AND/OR EXCEEDANCES

Donaldson/Abel Mine will keep a record of any complaint made in relation to noise from the Project site. Records will include:

- Date and time of complaint.
- Method by which the complaint was made.
- Personal details of the complainant (if provided).
- Nature of the complaint.
- Weather conditions corresponding to the time of the complaint.
- Action taken by Donaldson and any follow up actions.
- If no action was taken, the reason why no action was taken.

Donaldson will ensure that a response is provided, if requested, to the complainant within 24 hours.

A noise incident at Donaldson Coal is defined as 'any complaint or exceedance of noise criteria that is caused by the noise generated at the Abel or Donaldson coal mines'.

12.1 Non-Compliance Response Procedure

In the event of a measured exceedance of the relevant noise criteria or a complaint being received regarding noise, the following actions will be undertaken:

- Identify the noise source that has caused the complaint/exceedance. This would be done in consultation with the complainant and/or by conducting a noise survey to quantify the relevant noise emissions. If applicable, additional methods such as near field monitoring, unattended noise monitoring or computer noise modelling will be utilised to investigate noise emissions in relation to complaints, or to determine compliance with the PA conditions where potential non-compliances have been measured or are difficult to quantify from operator-attended noise measurements.
- Reassess the noise reduction techniques employed at the site and implement additional noise controls to further reduce impacts.
- Conduct a further investigation, following the adoption of noise controls, to evaluate the effectiveness of the mitigation strategy.
- Report details of any non-compliance and the results of noise monitoring/investigations to relevant agencies as soon as possible.

13. NOISE MANAGEMENT PLAN REVIEW

Monitoring results will be *regularly assessed* (in accordance with relevant Project Approval) by the appropriate Donaldson personnel on a six-monthly basis. Noise management reporting will be designed to comply with the PA and provide stakeholder access to relevant noise data. The NMP will be reviewed and/or updated, in accordance with Schedule 6 Condition 5 of the Abel PA or within three (3) months of any of the following:

- The submission of an annual review.
- The submission of an incident report.
- The submission of an audit.
- Any modification to the conditions of the PA.

Review of the NMP will also take place if monitoring records indicate that it is warranted or in the event of any significant change to operations or noise management procedures at the project site. This includes the plan will be reviewed and updated in consultation with the secretary prior to the Abel mine changing from care and maintenance to an operational site.

Any modifications to the NMP will be undertaken in consultation with the appropriate government agencies.

Further, Schedule 6 Condition 9 of the Abel PA provides a requirement for Donaldson to prepare and implement an Environmental Audit for the Project, to the satisfaction of the Director-General, which must:

(a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;

(b) include consultation with the relevant agencies;

(c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);

(d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and

(e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals

14. COMMUNITY CONSULTATION AND PERFORMANCE MONITORING

14.1 Community Consultation

Abel Coal Mine will ensure that the local community is kept informed of the progress of the project (by way of the Company website www.doncoal.com.au), including prior notice of:

- The nature of works proposed for the forthcoming period.
- Hours of operation.
- A 24 hour contact telephone number.

Abel Coal Mine will also ensure that the Annual Review, minutes from Community Consultative Committee meetings and results and interpretation of monitoring and/or modelling required by the PA are made publicly available at the mine and on the mine's website. Noise monitoring results will be made publicly available within 30 days of receipt of the final noise monitoring report.

This management plan will also be provided on the Donaldson Coal Website.

14.2 Continual Improvement

Through the effective application of best practice principles to on-site activities including, where cost-effective and practicable, the adoption of best practice technologies and noise control measures, Donaldson will continue to improve on the Donaldson/Abel Mine environmental performance with progress to be assessed against the noise limits noted in **Section 7**.

Appendix 1 Consultation Correspondence



SITE: 1132 John Renshaw Drive Black Hill 2322
 POSTAL: PO Box 2216 Greenhills 2323
 PHONE: +61 2 4015 1100
 WEBSITE: www.doncoal.com.au
 ABN 27 073 088 945

30th April 2019

Mr. Jack Murphy
 Environmental Assessment Officer
 Resource Assessments, Planning Services
 Department of Planning & Environment
 GPO Box 39
 SYDNEY NSW 2001

Dear Jack,

Re: Submission of Donaldson / Abel Draft Management Plans

Further to the Department's correspondence dated 6th December 2018 regarding the above, we advise that the Abel Coal Mine submitted the Independent Environmental Audit (IEA) Report on 11th February 2019 to the Department's Singleton Compliance Unit.

The 2018 Abel IEA triggered the revision of several management plans that are attached with this correspondence in draft format for the Department's review. Donaldson Coal has also sought comment from relevant Agencies and interested parties. Several of the Management Plans required under both PA 05_0136 (Abel Underground Mine) and DAs 118/698/22 and 98/01173 (Donaldson Open Cut) have been integrated as the relevant management actions and mitigation measures are consistent across both projects. All Management Plans have been reviewed and those listed below have been updated to reflect the current status of the operations during care and maintenance.

Below is a list of submitted management plans, together with the relevant agency that has been asked to comment.

Management Plan	Relevant Agency
Air Quality and Greenhouse Gas Management Plan	EPA
Noise Management Plan	EPA, OEH
Flora and Fauna Management Plan	NRAR, OEH, Councils
Waste Management Plan	OEH, DoP-RR
Tetratheca juncea Management Plan	OEH
Water Management Plan	EPA, NRAR
Rehabilitation Management Plan	DoP-RR, OEH, NRAR and Councils
Aboriginal Management Plan	Aboriginal Community, Councils and OEH

Please note that Management Plans required under Schedule 3 of PA 05_0136 relevant to the Extraction Plan are current and have not been revised.

The Blast Management Plan required under the Donaldson Open Cut Consent (DAs 118/698/22 and 98/01173) has not been revised as there is no longer a requirement to conduct any future blasting at the rehabilitated Donaldson Open Cut Mine.

The submitted Management Plans cover the current period of Care and Maintenance and may be updated where required prior to the recommencement of operations at the Abel Mine.

Upon receiving feedback from DP&E and relevant agencies, Donaldson Coal will review comments received and resubmit these management plans for approval.

We would appreciate if you would provide feedback on these Management Plans by the 31st of May 2019.

If you have any questions or would like to discuss these management plans, please don't hesitate to contact the undersigned on 0439 909 952.

Yours sincerely



Phillip Brown
Environment & Community Relations Superintendent
Donaldson Coal Pty Ltd



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30th April 2019

Mr. Mitch Bennett
Environment Protection Authority
PO Box 488G,
NEWCASTLE NSW 2300

Via email: hunter.region@epa.nsw.gov.au

Dear Mitch,

Re: Submission of Donaldson / Abel Draft Management Plans

Donaldson Coal Pty Limited have recently reviewed a number of environmental management plans for the Donaldson Open Cut Mine and Abel Underground coal mines. Donaldson coal mine ceased mining operations in 2013 and Abel coal mine has been in care and maintenance since 2016, with limited activities now occurring across either site.

Several Management Plans required under both PA 05_0136 (Abel Underground Mine) and DAs 118/698/22 and 98/01173 (Donaldson Open Cut) have been integrated as relevant management actions and mitigation measures are consistent across both projects.

As the risk associated with operational mining has now been minimised, management plans have been updated to reflect the current non-operational status of the sites.

Donaldson Coal is seeking comments from the EPA for the following attached Management Plans:

- Air Quality and Greenhouse Gas Management Plan
- Noise Management Plan
- Water Management Plan

Please note that Management Plans required under Schedule 3 of PA 05_0136 relevant to the Abel Extraction Plan are current and have not been revised.

We would appreciate the provision of comments and feedback on these management plans by the 31st May 2019 to meet statutory reporting requirements under project approvals.

If you have any questions or would like to discuss these management plans, please don't hesitate to contact the undersigned on 0439 909 952.

Yours sincerely,



Phillip Brown
Environment & Community Relations Superintendent
Donaldson Coal Pty Ltd

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