



DONALDSON COAL

Part of the Yancoal Australia Group

ABN: 87 073 088 945



Annual Review

Donaldson Coal Mine

1 November 2015 – 31 October 2016

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TITLE BLOCK

Name of Operation	Donaldson Coal Mine
Name of Operator	Donaldson Coal Pty Limited
Development consent / project approval #	DA 98/01173 and 118/698/22
Name of holder of development consent / project approval	Donaldson Coal Pty Limited
Mining Lease #	ML 1461
Name of holder of mining lease	Donaldson Coal Pty Limited
Water licence #	20BL168123
Name of holder of water licence	Donaldson Coal Pty Limited
MOP/RMP start date	16/05/2014
MOP/RMP end date	16/05/2021
Annual Review start date	1/11/2015
Annual Review end date	31/10/2016
<p>I, Phillip Brown, certify that this audit report is a true and accurate record of the compliance status of the Donaldson Coal Mine for the period 01 October 2015 to 31 November 2016 and that I am authorised to make this statement of behalf of DONALDSON COAL PTY LIMITED.</p> <p><i>Note.</i></p> <p>a) <i>The Annual Review is an 'environmental audit' for the purposes of section 122B (2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p>b) <i>The Crimes Act 1900 contains other offences relating to false and misleading information: Section 192G (Intention to defraud by false or misleading statement – maximum penalty 5 years imprisonment); Section 307A, 307B and 307C (false or misleading application/information/documents – maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
Name of authorised reporting officer	Phillip Brown
Title of authorised reporting officer	Environment and Community Manager
Signature of authorised reporting officer	
Date	30/06/17

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1. STATEMENT OF COMPLIANCE

The compliance status of relevant approvals was reviewed for the reporting period (see **Appendix 3**) and is summarised in **Table 1.1**. It was determined that there was one non-compliance during the reporting period. The non-compliance recorded during the reporting period has been ranked according to the risk matrix included in **Table 1.2**.

Table 1.1
Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	Yes / No
Development Consent (combined DA 98/01173 and 118/698/22)	Yes
Mining Lease 1461	No

Table 1.2
Non-compliances

Relevant Approval	Condition #	Condition Description (summary)	Compliance Status	Comment	Where Addressed in Annual Review
ML 1461	(44) Labour/ Expenditure	the lease holder shall during each year of the term of the authority: <ol style="list-style-type: none"> Ensure that at least 22 workers are efficiently employed on the subject area or Expend on operations carried out in the course of prospecting or mining the subject area, an amount of not less than \$385,000. The Minister may, at any time after a period of two (2) years from the date on which this authority has effect or from the date on which the renewal of this authority has effect, increase or decrease the amount of expenditure of labour required. 	Non-compliant	The Company has ceased operations and not met the required employment or expenditure. The Company will formally apply to DRE to suspend this requirement until lease relinquishment.	Section 10

Compliance Status Key

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

2. INTRODUCTION

2.1 OVERVIEW OF OPERATIONS

The Donaldson Coal Mine (the mine) is an open cut coal mining operation located ~23km from the Port of Newcastle, north of John Renshaw Drive and west of Weakleys Drive. The mining lease is contained within the Cessnock and Maitland Local Government Areas. An aerial photograph showing the location of the mine in a regional context is attached as **Appendix 1** of this report.

The mine commenced operation on 25th January 2001, following approval by the then Minister of Urban Affairs and Planning (now known as the Department of Planning and Environment) in 1999. Mining was undertaken by way of truck and shovel mining techniques. During the first 12 months of the operation, the bulk of the overburden material was placed in an out-of-pit emplacement, 1.5km south west of the active pit. This was undertaken to allow sufficient opening up of the pit to expose the various coal seams. Since March 2002, the majority of the overburden material has been placed in-pit, backfilling the void once the coal has been mined out. Reshaping of the backfill to a landform commensurate to the existing topography commenced in September 2002.

The first load of coal was railed from the mine on the 26th March 2001. Up to 31st October 2013, approximately 13,002,548 tonnes of coal has been railed to both Hunter Valley power stations and international customers, through the Port of Newcastle. Mining was conducted under long term contract with Cooks Construction Pty Ltd until Donaldson became the Operator on the 2nd February, 2009.

Mining operations at the mine were completed in April 2013. Progressive rehabilitation activities have been undertaken throughout the operation of the mine and a final rehabilitation project commenced in May 2013. This involved removal of roads, excavation of contaminated material, decommissioning of the fuel storage area, buildings and other surface infrastructure, reshaping surfaces to the final landform, topsoil spreading, drainage line construction and seeding with local tree and shrub species. The rehabilitation works at the mine were completed in March 2014.

2.2 SCOPE AND FORMAT

This Annual Review for the Donaldson Coal Mine has been compiled by Donaldson Coal Pty Limited (the "Company"). Donaldson Coal Pty Limited is a fully owned subsidiary of Yancoal Australia Limited.

This is the first Annual Review submitted for the mine, following Annual Environmental Management Reports (AEMRs), and is applicable for the period 1 November 2015 to 31 October 2016 ("the reporting period").

This Annual Review generally follows the format and content requirements identified in the *Annual Review Guideline* dated October 2015.

2.3 KEY PERSONNEL CONTACT DETAILS

Donaldson Coal Pty Ltd owns the mining operation and is the holder of the current mining lease. Donaldson is also the mining operator. **Table 2.1** outlines the site personnel responsible for the various aspects of the operation.

**Table 2.1
 Site Personnel**

Position	Site Personnel
Operations Manager, Donaldson Coal	Mr Aaron McGuigan
Environment and Community Manager, Donaldson Coal	Mr Phillip Brown

The following contacts have been provided for the Donaldson Coal Operations Manager, Mr Aaron McGuigan, and the Environment and Community Manager, Mr Phillip Brown.

**Table 2.2
 Contact Details**

Donaldson Coal Mine 1132 John Renshaw Drive BLACKHILL NSW 2322	PO Box 2275 GREEHILLS NSW 2323
Phone: (02) 4015 1100	Community Hotline (24hrs): 1800 111 271
Fax: (02) 4015 1159	
e-mail:	donaldson@doncoal.com.au
Internet:	www.doncoal.com.au

A 24-hour Environmental Hotline (Tel: 1800 111 271) is maintained by the Company. Details of calls are taken by the Environment & Community Manager for further actioning, if required.

3. APPROVALS

Table 3.1 provides a current list of statutory instruments in effect, including the date of grant of all leases, subleases, consents, approvals and licenses. It also includes information relating to the current Mining Operations Plan (MOP). Details of amendments to the MOP are described below.

Table 3.1
Donaldson Coal Mine – Approvals, Leases and Licences

Approval/Lease/Licence	Issue / Approval Date	Expiry Date	Details / Comments
Mining Lease (No. 1461)	22/12/1999	22/12/2020	A copy of the mining lease is available for review at the Donaldson Coal office.
Mining Operations Plan	16/05/2014	16/05/2021	Amended MOP as approved by the DTI DRE.
Development Consent (combined DA 98/01173 and 118/698/22)	14/10/1999 26/08/2005 24/06/2011	March 2011 31/12/13	Certain conditions of the consent continue to operate after the consent for mining operations has lapsed. Variation to Development consent for modification to mining area. Variation to Development Consent for extension of time for mining to be completed.
Environment Protection Licence (No. 11080).	13/09/2000	Not Applicable	Anniversary date 13 September. Current licence version dated 2 December 2011.
Bore Licence (No. 20BL168123)	18/04/14	17/04/19	Issued to cover groundwater extraction as a result of the active mining area. <i>The Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016</i> commenced 1 July 2016. However, the bore licence has not yet been converted by Water NSW to a Water Access Licence and Water Supply Works Approval. Advice from Water NSW indicates that the existing licence should continue to be implemented in its current form until the new licencing is issued.
Water Supply Works Approval (20WA211590)	01/08/09	31/07/22	Issued for the works associated with the open cut mining pits as located within the <i>Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009</i> .

4. OPERATIONS SUMMARY

4.1 MINING OPERATIONS

Coal mining activities ceased in April 2013 and all mining equipment was removed from site. No coal mining was undertaken during the reporting period or is planned during the next reporting period. **Table 4.1** presents a summary of the production statistics.

Table 4.1
Production Summary

Material	Approved limit (specify source)	Previous reporting period (actual)	This reporting period (actual)	Next reporting period (forecast)
Waste Rock / Overburden	No longer applicable	0	0	0
ROM Coal / Ore		0	0	0
Coarse Reject		0	0	0
Fine Reject (Tailings)		0	0	0
Saleable Product		0	0	0

4.2 OTHER OPERATIONS DURING THE REPORTING PERIOD

During the reporting period no exploration, land preparation or construction activities were undertaken. Additionally, no coal processing or transportation activities were undertaken within ML1461 during the reporting period.

Environmental monitoring activities continued throughout the reporting period. Results of this monitoring is summarised in Section 6.

Rehabilitation activities were previously completed in March 2014 and no further rehabilitation occurred the reporting period.

4.3 NEXT REPORTING PERIOD

The activities proposed for 2016/2017 will principally involve continued monitoring and, if required, maintenance activities in accordance with the approved MOP for Closure. The following provides a summary of the planned activities.

Exploration

The Company currently does not intend to undertake any drilling within ML1461 during the 2016/2017 reporting period.

Mining

No further mining will be undertaken.

Rehabilitation

All rehabilitation works have previously been completed. Any rehabilitation works during the 2016/2017 reporting period will relate to ongoing maintenance, principally erosion and sediment control and vegetation establishment.

Monitoring

The following monitoring will be undertaken during the next reporting period.

- Surface water – ongoing surface water quality monitoring in accordance with the site EPL and Water Management Plan. Monitoring will be undertaken by Carbon Based Environmental.
- Groundwater – ongoing groundwater level and quality monitoring will be undertaken by Carbon Based Environmental.
- Flora and Fauna – Kleinfelder Australia Pty Ltd will continue to undertake annual flora and fauna surveys and reporting.

Community Consultation and Liaison

The 24-hour environmental hotline will be maintained and a register retained of any complaints received.

5. ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

The 2015/2016 AEMR was forwarded to DRE and DPE on 29 January 2016. A site inspection was undertaken by DRE and feedback was received from the DRE dated 7 March 2016. The AEMR was considered to satisfy the requirements of the relevant conditions of ML1461. Feedback from DPE was received on 22 June 2016.

Table 5.1 summarises the actions arising from the previous Annual Review / AEMR.

Table 5.1
Actions from the previous Annual Review

Page 1 of 3

Action required from previous Annual Review	Requested by	Action taken by the Operator	Where discussed in Annual Review
Provide DRE with a revised 'Table 17: Rehabilitation Summary' with correct area estimates.	DRE	Table provided to DRE by email 21.03.16	5
Erosion within drainage channel to 'Brown's Hole' (Stabilise drainage channel).	DRE	Repairs were carried out to the drain leading to Brown's Hole.	7.1
Routine inspection of all drainage structures should be undertaken in order to detect (and hence to enable repair of) any structural failures.	DRE	Routine inspections were undertaken throughout the reporting period. No additional repairs were required.	7.1
Sediment Dam E – bank erosion. Continue to monitor behaviour of bank erosion. Undertake remedial work as necessary.	DRE	Ongoing monitoring of erosion at Sediment Dam E was undertaken throughout the reporting period. No remedial works were required.	7.1
Please show the mine site boundary on the figure in Appendix 1 showing the regional context.	DPE (25/02/16)	The regional context figure has been updated accordingly.	Appendix 1
Please show the name and drainage lines of the creeks and rivers applicable to the site, in the figures in Appendix 1 labelled Surface Water Monitoring Locations, and Groundwater Monitoring Locations.	DPE (25/02/16)	The monitoring figures have been updated accordingly.	Appendix 1
Condition 114(v), Schedule 2 requires a comparison of the monitoring results against the EIS predictions. Please include a discussion of the air quality results compared to the numbers and trends predicted in the EIS.	DPE (25/02/16)	Additional detail is now presented, including graphical presentation of current and previous data, discussion of trends and comparison to EIS predictions.	Sections 6.5 and 7
To assist the Department in comparing the monitoring results, please include the previous year's summary or averaged data, and the EIS predicted values, in Tables 8, 10, 11 and 12. Please also include a discussion following a comparison of the results.	DPE (25/02/16)	Graphical representation of current and previous monitoring results has been included for deposited dust, TSP and PM ₁₀ monitoring and additional discussion provided.	Section 6.5
The Department notes that the surface water monitoring results in Scotch Dairy Creek are moderately acidic (lowest pH value is 4.81), and more acidic than pre-mining levels. The Department notes that the downstream results are more acidic than the upstream results. Please investigate and report on the potential source and extent of this acidic influence, and the potential impact on surrounding sensitive receptors.	DPE (25/02/16)	Analysis of comparative upstream and downstream data indicates that pH fluctuations have occurred both upstream and downstream and are therefore not likely a result of the mining activity. It is considered more likely the result of natural fluctuations with lower pH during low flow conditions, possibly due to acidification from the naturally low pH soils in the area.	Section 7.1 and Appendix 5

Table 5.1 (Cont'd)
Actions from the previous Annual Review

Page 2 of 3

Action required from previous Annual Review	Requested by	Action taken by the Operator	Where discussed in Annual Review
The Department notes that the groundwater monitoring results in groundwater bores REG DPZ-1, DPZ3 and DPZ8 are moderately to strongly acidic (lowest pH value is 2.99), an more acidic than pre-mining levels. The Department also notes that these bores are located in the general of Scotch Dairy Creek, also reporting low pH levels. Please investigate and report on the potential source and extent of this acidic influence, and the potential impact on surrounding sensitive receptors.	DPE (25/02/16)		Section 7.2 and Appendix 5
Condition 114(iv), Schedule 2 requires the AEMR to identify any trends in the monitoring data over the life of the project. The Department notes that trends are not discussed in relation to surface water monitoring, biological monitoring, or groundwater monitoring (in particular the EC data). Please include a discussion of these trends.	DPE (25/02/16)	Graphical presentation and discussion of trends is now included.	Section 7
Please tabulate the results for each surface water and groundwater monitoring event, to be able to compare upstream and downstream values from the same monitoring event. Currently the presentation of data only allows for a comparison between the absolute highest and the absolute lowest results. This may result in comparing different sampling events and drawing inaccurate comparisons between upstream and downstream difference.	DPE (25/02/16)	A detailed tabulated summary is now provided which allows direct comparison. Graphical presentation is also provided for all monitoring results since the year 2000.	Section 7 / Tables 7.1 And 7.4
The Department notes that some pre-mining values do not exist in Table 16 in the Groundwater Pollution section. Where no pre-mining value exists, please insert the average of each dataset of the pH, EC and SWL results since monitoring began.	DPE (25/02/16)	Site averages added to table.	Section 7.2 / Table 7.4.
The Department notes that there is some variability in the EC results reported in Table 16 in the Groundwater Pollution section. Please include more discussion on these trends.	DPE (25/02/16)	A summary of the trends in EC is now provided.	Section 7.2
Please report on the performance of the pest management program, documenting any surveys conducted and pest trapping or baiting undertaken.	DPE (25/02/16)	No feral species were recorded during the 2015 rehabilitation monitoring. No further survey or specific pest control measures have been deemed necessary.	-
Please include the rehabilitation commitments (in hectares) from the approved Mining Operations Plan in Table 17, Rehabilitation Summary. Also, note in Table 17 whether the totals are cumulative. Please also note if there are other outstanding tasks, such as decommissioning or removal of infrastructure.	DPE (25/02/16)	The rehabilitation commitments in hectares are summarised. The areas provided are cumulative. No outstanding tasks remain except ongoing monitoring and maintenance as required.	Section 8.1

Table 5.1 (Cont'd)
Actions from the previous Annual Review

Page 3 of 3

Action required from previous Annual Review	Requested by	Action taken by the Operator	Where discussed in Annual Review
<p>The Department notes that in Appendix 4 of the report, response to Condition 63 notes that <i>"Four (4) monitoring bores destroyed as part of the mining operations. These will be replaced when the backfilling of the area is completed."</i> Please provide the Department a timeframe for completion of this work or if the commitment has been satisfied by the information in section 3.5 Groundwater Pollution which has 7 bores.</p>	<p>DPE (22/06/16)</p>	<p>A review of the integrated groundwater monitoring network was completed by Dundon Consulting Pty Ltd in February 2016. This reviewed concluded (among other things) that the current groundwater monitoring network is adequate and no changes were considered necessary. As a result, the referenced monitoring bores are no longer planned to be replaced.</p>	<p>Table 5.1</p>
<p>The Department notes that in Appendix 4 of the report, Condition 115 that in the comments/notes column that "No additional requirements for the AEMR's have been advised from the Director-General" which does not comply with the requirements of condition 115 (i) and (ii).</p>	<p>DPE (22/06/16)</p>	<p>Section 1.4 of the 2014/15 AEMR addressed actions / requirements raised by DPE in relation to the previous AEMR. The Company has also reviewed DPE's actions / requirements arising from the 2014/15 AEMR and address these within this table. The commentary for Condition 115 has been updated accordingly.</p>	<p>Appendix 3</p>

6. ENVIRONMENTAL PERFORMANCE

6.1 SUMMARY OF ENVIRONMENTAL PERFORMANCE

A summary of environmental performance for the principal environmental aspects is provided in **Table 6.1**. Further detail regarding specific environmental aspects is also provided in the following subsections.

Table 6.1
Environmental performance

Aspect	Approval criteria / EIS prediction	Performance during the reporting period	Trend/key management implications	Implemented/proposed management actions
Noise	DA Condition 15 – approved noise limits range from 35dB(A) to 50dB(A).	No complaints.	Implies management measures are currently adequate.	No additional management action required.
Blasting	DA Condition 24 - Overpressure 115dB(A) & max 120dB(A). - Vibration 5mm/s & max 10mm/s.	No blasts undertaken.	Implies management measures are currently adequate.	No additional management action required.
Air Quality	DA Condition 37 Annual average TSP 90ug/m ³ & deposited dust 4g/m ² /month.	No complaints.	Implies management measures are currently adequate.	No additional management action required.
Biodiversity	DA Condition 70 – Provision of compensatory habitat.	Monitoring completed just outside of this reporting period.	Overall findings to date are that there have been no significant impacts on floristic or fauna diversity within the Donaldson Bushland Conservation Area over the last 15 years	No additional management actions proposed. Monitoring to continue.
Heritage	DA Conditions 81-86 – Aboriginal Heritage Conservation Area & Management Plan.	No heritage items identified or disturbed during reporting period. No complaints or other management issues.	Implies no specific management actions were necessary.	No additional management action required.

6.2 METEOROLOGICAL MONITORING

Abel operates a weather station on site. **Figure 6.1** presents the monthly windroses for the reporting period whilst **Table 6.2** provides the monthly rainfall data.

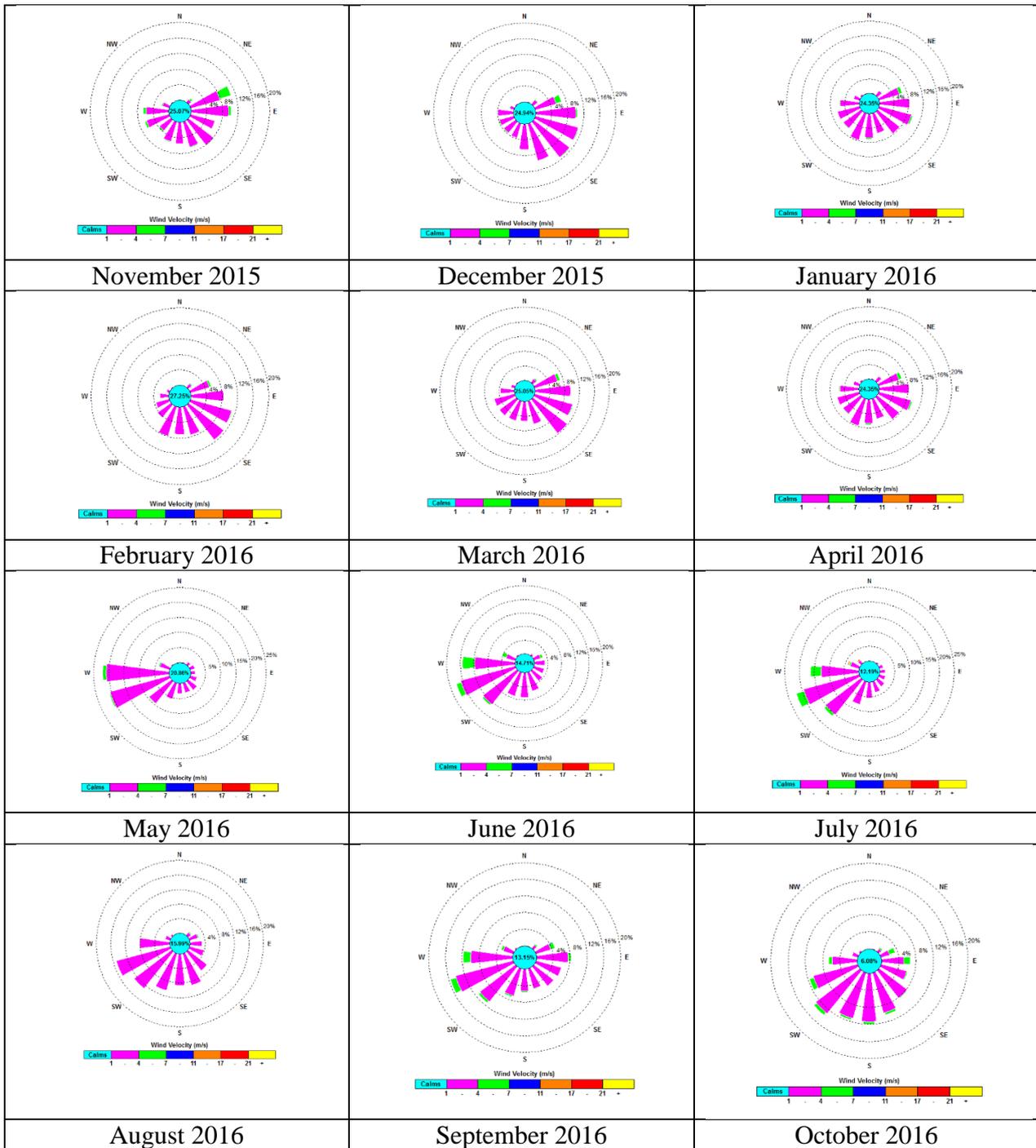


Figure 6.1 Monthly Windroses 2015/16

6.3 NOISE

As mining ceased in April 2013, no operational noise monitoring was undertaken during the reporting period. Based on the absence of activities and community complaints, no specific noise management measures were required and no further improvements are necessary. No further monitoring is currently proposed.

Table 6.2
Monthly Rainfall Records

Average Monthly Rainfall (mm)													
Period	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2000	61	32	279	146	45	24	27	31	33	47	106	32	863
2001	46	169	193	114	244	3.4	63	22	12	31	91	38	1026.4
2002	48	281	184	66.4	62.1	30	30	21	17.4	18.8	56.2	149.2	964.1
2003	6	90	22.2	77	135	13.2	43	27.4	0	63.2	137.6	39	653.6
2004	86	176.6	80	33.6	17.4	9.4	15.4	43.1	61.2	136	77.4	69.8	805.9
2005	64.4	95.8	127.8	57.4	61.8*	56.8	7.2	0.8	37	84	22.8	9.6	625.4
2006	29.8	47.4	63.6	4.6	7.8	43.8	42.6	49.2	162.4	25.4	37.8	35.6	550
2007	13.4	88	102	86	60	301	17	79.6	19.8	17.2	163.8	49.5	997.3
2008	153.4	154.3	46	237.6	2.2	122.9	30	28.5	195.3	62.2	73.3	62.6	1168.3
2009	11.3	97.7	136.5	157.2	125.7	75.7	32.1	1.8	29.2	59.8	51.4	62	840.4
2010	0	52.1	83.9	37.1	89.4	112.8	65.3	38.5	26.4	80.6	171.1	39.9*	797.1
2011	26	34.5	65.6	137.9	98.8	152	129	49	103	100	171.9	75.9	1143.6
2012	96.1	207	137.6	114.7	11.8	172.3	53.8	26.6	18.7	5.7	21.8	1.2	867.3
2013	1	100	64.2	65.8	59.8	63.8	71.8	9.6	21.8	27	261.8	2.6	1094
2014	15.6	108.3	112.8	99.3	44.3	31.4	24.6	104	42.4	55	38.4	133.4	809.5
2015	167	48	73.3	412	89.4	44.6	17.9	30.6	56.8	59	69.8	103.8	1172.2
2016	430.8	26	78	31.8	13.4	113	44.2	74.2	60	43.8			
Average	73.9	106.3	108.8	110.5	69.1	80.6	42.0	37.5	52.7	53.9	97.0	57.6	898.6

6.4 BLASTING

No blasting was undertaken during the reporting period.

6.5 AIR QUALITY

Donaldson operates the following dust monitoring equipment:

- One High Volume Air Sampler (HVAS) measuring TSP;
- Two HVAS measuring PM₁₀;
- One continuous Dustrak monitor measuring PM₁₀; and,
- Ten Depositional Dust Gauges measuring insoluble solids (deposited dust).

The locations of dust monitoring equipment are outlined in **Appendix 1**. It is noted that measurements taken at any of these locations will include all background air pollution relevant to those locations, as well as any contribution occurring from the mine.

Environmental Management

The reviewed Donaldson Air Quality Management Plan (Holmes Air Sciences, 2007) details the range of measures employed by Donaldson to control airborne dust. Given that no operational activities occurred during the reporting period and the mine had been rehabilitated, no specific air quality management measures were required during the reporting period.

Environmental Performance

No dust complaints were received during the 2015/16 AEMR reporting period.

A review of the dust monitoring data for the period suggests that there has been no significant change in the regional dust levels as a result of activities at the Donaldson Coal Mine compared to the previous reporting period.

A summary of the air quality monitoring data for the 2015/16 reporting period is provided in **Tables 6.3 to 6.7** and **Figure 6.2** and **6.3**.

Depositional Dust Gauges

Results were recorded for 120 monthly samples at ten (10) dust gauges out of a possible total of 120. Results were generally obtained with acceptable levels of contamination from other sources, such as insects, bird droppings and vegetation. A summary of the results for the reporting period is presented in **Table 6.3** whilst the annual rolling averages since commencement of monitoring in the year 2000 are shown in **Figure 6.2**.

Table 6.3
Deposited Dust Monitoring Results 2015-2016

Sample Site	No. Samples Required	No. samples collected and analysed	Maximum Insoluble Solids (g/m ² /month)	Minimum Insoluble Solids (g/m ² /month)	Annual Average Insoluble Solids (g/m ² /month)
DG1	12	12	2.0	0.3	0.6
DG2	12	12	1.1	0.2	0.5
DG3	12	12	4.2	0.6	1.3
DG4	12	12	1.9	0.4	0.9
DG7	12	12	1.6	0.3	0.7
DG8	12	12	2.5	0.4	1.0
DG9	12	12	1.5	0.3	0.9
DG10	12	12	2.3	0.3	1.0
DG11	12	12	1.3	0.5	0.8
DG12	12	12	1.5	0.2	0.9

During the reporting period, all gauges were in compliance with the Donaldson Air Quality Management Plan, with annual average insoluble solid results for each gauge below the criteria of 4g/m²/month with the exception of DG3 during August 2016 which recorded a result of 4.2g/m²/month. DG3 is approximately 1.7km in a south/south west direction from the mine. As demonstrated by the windrose generated for the August 2016 period (see **Figure 6.3**) the dominant winds were from the south west direction, i.e. blowing any dust from the mine away from DG3. In any event, given that all mining and earthmoving activities have been completed at the Donaldson Coal Mine and the site has been rehabilitated, this high result is considered the result of other local or regional sources. Results are generally similar to or slightly higher than the previous year's results and indicate no major increase in dust emissions.

In comparison to previous reporting periods, the rolling annual averages at all sites has been generally consistent for a number of years. Previously recorded spikes in deposited dust, particularly at gauges D2, D3 and D8 are thought to be the result of local events and have not corresponded with elevated levels recorded at nearby gauges or with mining activities. Notwithstanding this, there have been no exceedances of the criteria since prior to 2011 which is consistent with the EIS predictions that exceedances would not occur.

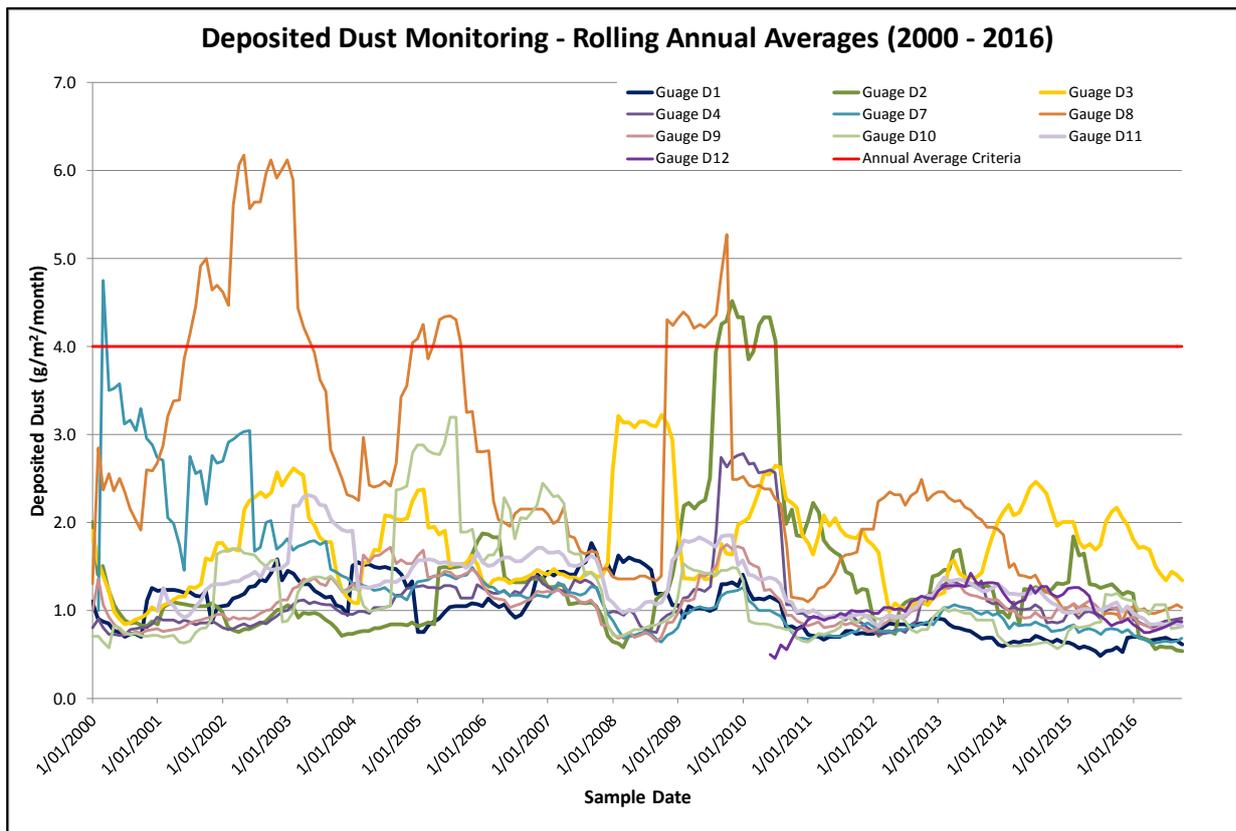


Figure 6.2 Deposited Dust Monitoring – 2000 to 2016

High Volume Air Samplers

This section outlines the results of the high volume air samplers located at Blackhill Primary School and the Beresfield Golf Course. Two sets of measurements have been performed during the reporting period, PM₁₀ (particulate matter of diameter less than 10 μm) and TSP (total suspended particulate matter). **Table 6.4** displays the data capture rate for the three high volume air sampler units during the period.

Table 6.4
High Volume Air Sampler Data Capture Rate

Monitoring Location	Data Capture Rate (%)
Blackhill Primary School (PM ₁₀)	100
Blackhill Primary School (TSP)	100
Beresfield Golf Course (PM ₁₀)	100

PM₁₀

The annual average PM₁₀ at both monitoring sites was below the annual average maximum criteria of 30μg/m³. The annual average PM₁₀ at the Beresfield Golf Course and at the Blackhill Primary School was similar when compared to the previous 2014/15 reporting period. PM₁₀ results are displayed in **Table 6.5** whilst the results since commencement of monitoring in the year 2000 are shown in **Figure 6.3**.

During the 2015/16 AEMR reporting period, no PM₁₀ measurements exceeded the 24-hour NEPM maximum criteria of 50μg/m³. Excepting an annual trend of lower 24-hour average PM₁₀ during the winter months and higher 24-hour averages during the summer months, no long-term trends are currently apparent. Of note, there has been

no significant change in the maximum and rolling annual average PM₁₀ levels since completion of mining in 2013 and rehabilitation in 2014. This indicates that the mining activities were not having a significant influence on PM₁₀ levels at the monitoring sites. This is consistent with the EIS prediction of an increase of no more than 10µg/m³ in the annual average at surrounding residences.

**Table 6.5
PM₁₀ Monitoring Results (High Volume Air Sampler) – 2015/2016**

Sample Site	No Samples Required	No samples collected and analysed	Maximum PM ₁₀ Value (µg/m ³)	Minimum PM ₁₀ Value (µg/m ³)	Mean PM ₁₀ Value (µg/m ³)
Blackhill Primary School	61	61	46.40	3.6	15.74
Beresfield Golf Course	61	61	45.40	5.80	17.96

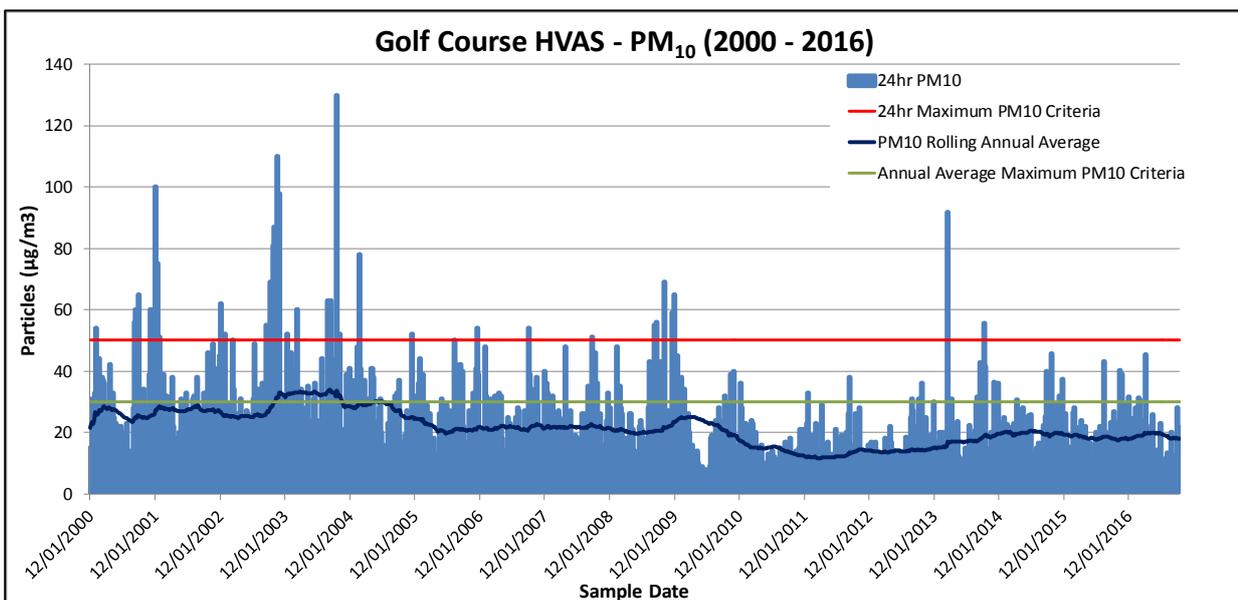
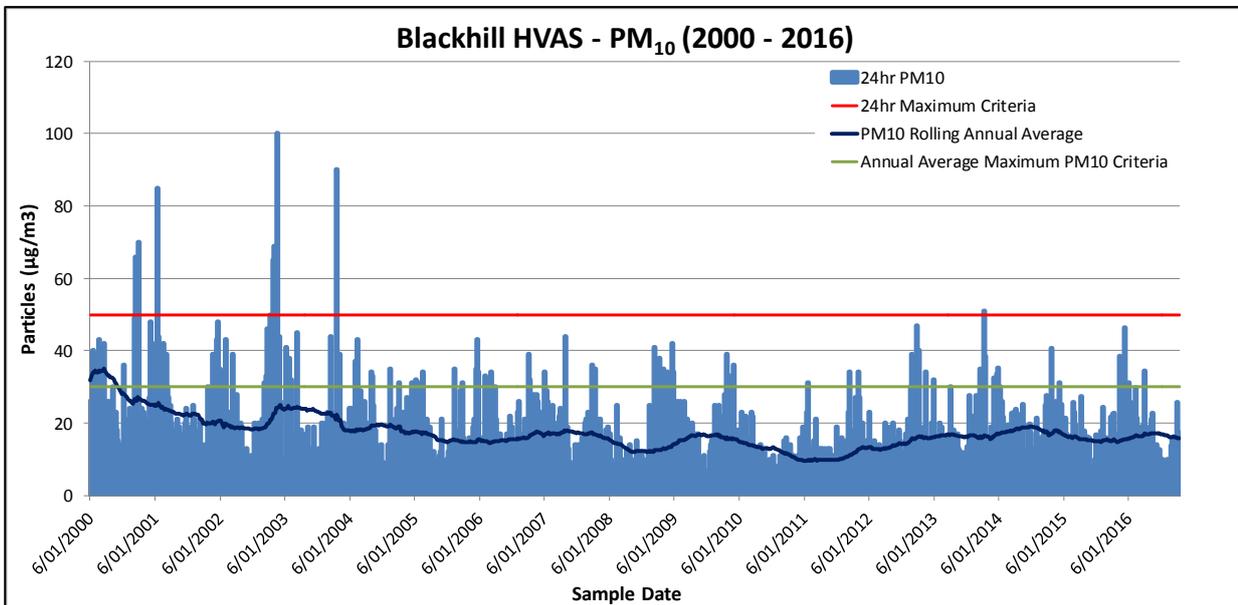


Figure 6.3 HVAS Results – PM₁₀ (2000 to 2016)

Total Suspended Particles

The annual average TSP result at Blackhill Primary School ($30.00\mu\text{g}/\text{m}^3$) was well below the annual average criteria of $90\mu\text{g}/\text{m}^3$. While there are no specified criteria for a 24-hr maximum TSP in the development consents or Environment Protection License, all TSP results were well below the US EPA short term good air quality criteria of $260\mu\text{g}/\text{m}^3$. TSP results for the reporting period are displayed in **Table 6.6** whilst the results since commencement of monitoring in the year 2000 are shown in **Figure 6.4**.

Table 6.6
TSP Monitoring Results (High Volume Air Sampler) – 2015/2016

Sample Site	No Samples Required	No samples collected and analysed	Maximum TSP Value ($\mu\text{g}/\text{m}^3$)	Minimum TSP Value ($\mu\text{g}/\text{m}^3$)	Mean TSP Value ($\mu\text{g}/\text{m}^3$)
Blackhill Primary School	61	61	67.90	9.80	30.00

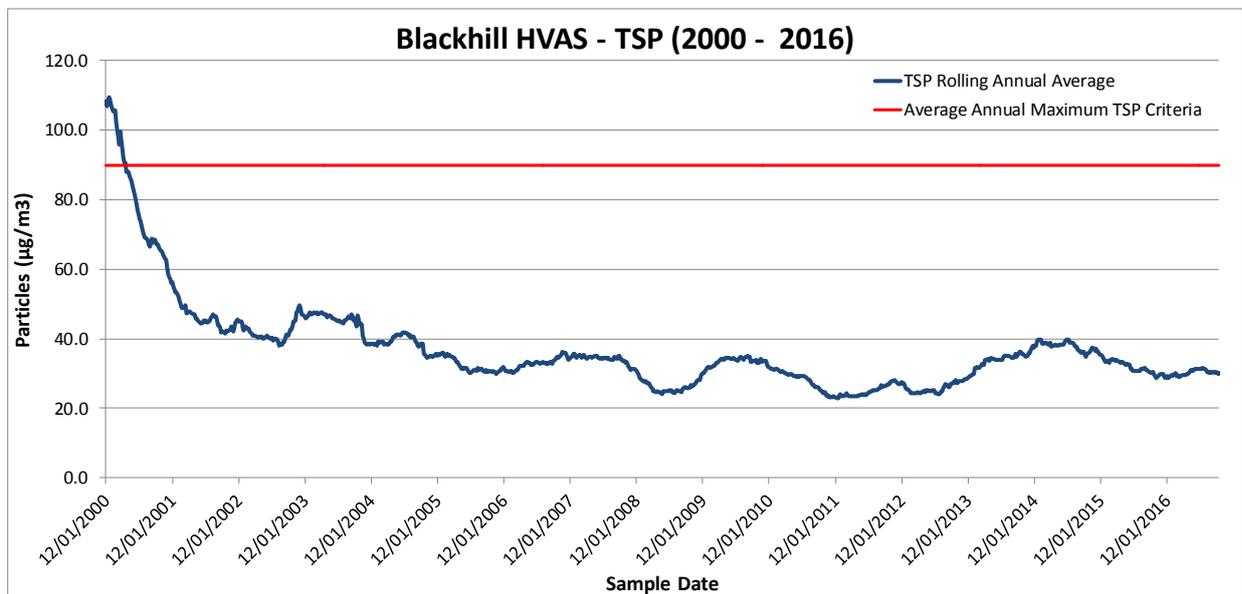


Figure 6.4 HVAS Results – TSP (2000 to 2016)

The results recorded during this reporting period are similar when compared to the corresponding measurements of the 2014/15 reporting period. This continues to indicate a low dust impact from the mine. The ratio of the average PM_{10} to TSP over the 2015/16 AEMR reporting period was 52%, which is a slightly higher ratio than the 2014/15 AEMR reporting period (50%) indicating a small increase in finer particulates in the Total Suspended Particulates, however, the ratio remains well below the 2012/2013 AEMR reporting period (57%).

Unlike PM_{10} , there does not appear to be obvious seasonal trends in TSP. TSP was not modelled and no predictions were included within the EIS, however, as can be seen in **Figure 6.4**, TSP levels have consistently been well below the relevant criteria.

Dustrak Monitors

Donaldson operates one continuous Dustrak air quality monitor at Blackhill Primary School.

Table 6.7 summarises the Dustrak monitoring data and the data capture rate. The measurement of PM₁₀ by optical methods (such as the Dustrak monitors) is known to be particularly sensitive to rainfall or high humidity events. Monthly inspections of the Dustrak monitors and regular servicing of the instruments assist with reducing occasions when the measurements become unstable or drift from sensible values. However, as can be seen in **Figure 6.5**, the Dustrak monitor experienced a period of downtime during June/July 2016. Since that time, the results have been highly variable and do not reflect the monitoring results recorded by the nearby HVAS. Given that operations have ceased, consideration will be given to the removal of the Dustrak monitor from the monitoring network with reliance placed upon the HVAS. Variation of EPL11080 and update of the Integrated Monitoring Program would be undertaken as necessary.

The annual air quality monitoring data provided to Donaldson by RCA Laboratories provides a graph of all the data collected. A chart of the Dustrak data for the 2015/16 reporting period is presented in **Figure 6.5**.

**Table 6.7
Dustrak Results – 2015/2016**

Site	Data collection	Data recovery (%)	Highest 24-hour average PM ₁₀	Annual average PM ₁₀	Lowest 24-hour average PM ₁₀
Blackhill Primary School	Continuous	91	91.4	22.5	4.2

Note: Data in this table is for the annual reporting period 1 November 2015 to 31 October 2016 as reported by RCA Laboratories.

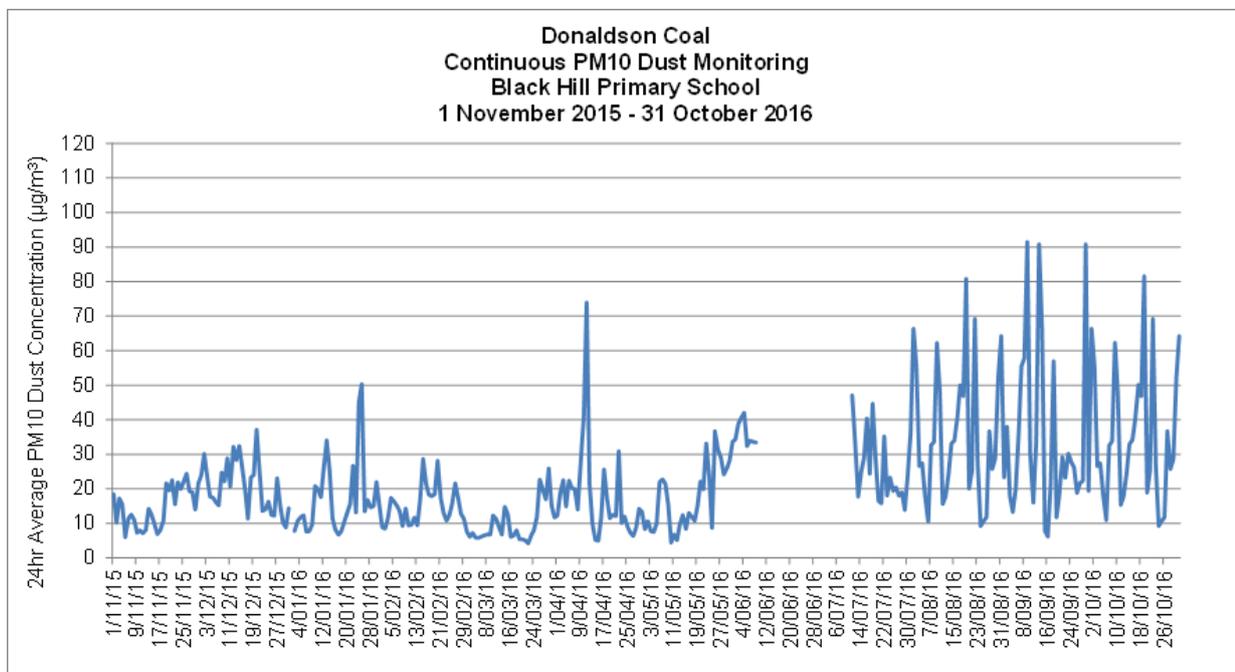


Figure 6.5 Results of Dustrak Continuous Monitoring

The results from Dustrak monitoring are similar to those obtained from the PM₁₀ High Volume Air Sampler at the Blackhill Primary School. The annual average was below the maximum NEPM annual average criteria of 30µg/m³. A number of the 24hr results exceeded the 24-hour NEPM maximum criteria of 50µg/m³. Given that no mining or earthmoving activities occurred and rehabilitation has been completed at the Donaldson Coal Mine, these exceedances are considered the result of other local or regional sources.

Reportable Incidents

No reportable incidents were recorded during the 2015/16 reporting period.

6.6 THREATENED FLORA

Environmental Management

During the reporting period, flora and fauna values have principally been managed through the ongoing implementation of the flora and fauna monitoring program for the disturbance area and compensatory habitat area. These management measures are outlined in detail within the revised Flora and Fauna Management Plan (dated May 2007) prepared for the mine.

Regular inspections for weeds were also undertaken during the reporting period. Excepting periodic slashing undertaken by Energy Australia of their easement, no specific weed control measures were required during the reporting period.

Environmental Performance

There was one species of threatened flora identified during the EIS, *Tetratheca Juncea* (Black-eyed Susan). As a result a *Tetratheca Juncea* Management Plan was developed by (Gunninah, 2000a). The aim of the plan is to provide a comprehensive program for the *Tetratheca Juncea* population in the south western portion of the mine site.

A survey and identification report (Gunninah, 2000b) was completed, which located the boundaries of the population and defined the limit of the conservation precinct. Subsequent works during 2001 and 2002 has extended the boundary and up to an additional two hundred (200) plants have been found during routine monitoring and vegetation characterisation.

In addition, approximately four hundred (400) plants have been discovered during routine pre-clearing surveys and monitoring episodes. A large proportion of these plants fall outside of the active mine area, adding further conservation significance to the area(s) identified and managed by Donaldson as the *Tetratheca Juncea* Conservation Area (TJCA) (as discussed below).

In 2005, a design was developed for the experimental translocation of *Tetratheca Juncea* from the planned mine disturbance area. Translocation is a management technique addressed in the *Tetratheca Juncea* Management Plan (Gunninah 2000a).

The experimental design for the translocation was based on a study conducted in the Gwandalan area (Ecobiological, 2005). The ongoing monitoring of the translocated plants will focus on collecting data and information about the circumstances under

which the plants are growing. Each plant and each recipient site has been photographed following translocation and will be photographed every twelve months for 5 years. The plants were monitored and watered on a weekly basis for 6 weeks post planting to help ensure maximum initial survival and were inspected twice per year for the five-year period. As no translocations have occurred for over 5 years, consideration will be given to whether further monitoring is undertaken.

Environmental Management

The following control measures are employed at the mine in order to ensure a high level of conservation for the threatened plant species *Tetratheca Juncea*:

- The protection of 650ha of bushland around the mine to conserve habitat;
- The reduction of the proposed mining footprint and the establishment of a conservation precinct protecting a known population of *Tetratheca Juncea*;
- Ongoing mapping and management protocols; and,
- Pre-clearing surveys by a qualified biologist prior to any clearing activities.

In addition Donaldson supported both financially and technically, an honours student completing studies in Environmental Management at the University of Newcastle. The project commenced in January 2002 and considered the ecology and growth of *Tetratheca Juncea*.

General flora monitoring undertaken at the mine has included:

- Woody debris survey;
- Flora quadrant monitoring;
- Biomass assessment;
- Floristic identification;
- Foliage projective cover assessment; and,
- Tree height and basal area assessment.

Environmental Performance

A baseline report was completed in January 2003 by Barker Harle. This report describes the implementation of the *Tetratheca Juncea* Management Plan and includes baseline information for use in subsequent reports. Subsequent monitoring and reporting is undertaken on an annual basis. It is noted, however, that annual monitoring was undertaken in November 2016, i.e. outside the current reporting period. The results of this monitoring will be presented within the next Annual Review.

Previously the monitoring data has shown a population that has significantly declined since the start of monitoring. Evidence points to *Tetratheca juncea* being out-competed by other ground species. Overall, the monitoring indicates that the *Tetratheca juncea* population would benefit from a fire. This would both reduce the current level of competition and provide more nesting areas for tunnelling native bee pollinators.

There has been one published study by Norton (1994) and one unpublished study Driscoll (2004) looking at the response of *Tetratheca juncea* to fire. Both studies showed that plant clumps resprout following fire. Norton (1994) noted that fire temperature and duration of heating experienced by plant clumps had an effect on their ability to resprout. High temperatures are likely to burn deep into the rootstock which results in the plants being killed. Driscoll (unpub) observed that, even if the main rootstock was killed, the plant could resprout from secondary roots away from

the original location. Bartier et al. (2001) studied germination of *Tetratheca juncea* seed and found that application of smoke water resulted in a significant increase in germination rate.

General flora assessments previously conducted by Kleinfelder have determined that floristic diversity recorded in 2015 has remained similar to 2014, with an overall increase species richness since the baseline survey in 2001. This is indicative of a dynamic plant community with high recruitment from the seed pool, normally an indicator of healthy, regenerating plant community status (Kleinfelder, 2015b).

All biomass variables examined (i.e. basal area, height, foliage projective cover (FPC) and stand volume) have also shown consistent and substantial increases over the last 15 years since the baseline survey in 2001. A regression analyses undertaken by Kleinfelder confirms that the relationship between time and increases in FPC and stand volume were highly significant indicating that the community biomass has increased substantially across time with no significant year-to-year variation from 2001 to 2015.

Reportable Incidents

No reportable incidents were recorded during the 2015/16 AEMR reporting period.

6.7 THREATENED FAUNA

Several species of threatened fauna were identified during the EIS and supplementary reports, including both the areas proposed for mining and the immediate environs. They include the following:

- The Powerful Owl;
- The Masked Owl;
- The Barking Owl;
- Sooty Owl;
- Varied Sittella;
- Yellow-bellied Sheath-tail Bat;
- Eastern Bent-wing Bat;
- Eastern Freetail Bat;
- Eastern Cave Bat;
- Greater Broad-nose Bat;
- Little Bent-winged Bat;
- Southern Myotis;
- Little Lorikeet;
- Squirrel Glider.
- Eastern False Pipistrelle

Environmental Management

To ensure a high level of conservation for the threatened fauna species found on the site the following management measures have been implemented.

- The protection of 650ha of bushland around the mine to conserve habitat.
- Ongoing survey and management protocols.
- Routine annual quadrant monitoring.
- Placement of nest boxes in the Bushland Conversation Area to replace nesting sites destroyed by clearing.
- Ongoing and progressive rehabilitation of disturbed areas.

Fauna monitoring activities are undertaken annually. It is noted, however, that annual monitoring was undertaken in November 2016, i.e. outside the current reporting period. The results of this monitoring will be presented within the next Annual Review. Previous monitoring has included:

- Small mammal trapping;
- Insectivorous bat harp trapping;
- Insectivorous bat call recording;
- Owl call playback;
- Spotlighting;
- Bird surveys; and,
- Nest box monitoring.

Monitoring activities are carried out during summer and winter, as well as a recolonisation survey of the rehabilitated areas at the mine.

Environmental Performance

The previous 2015 survey detected a total of 89 fauna species consisting of 51 birds, 10 non-flying mammals, 17 bats, seven amphibians and four reptiles. Six of the recorded bat species are listed as threatened under the NSW *Threatened Species Conservation Act 1995*. The fauna species results in 2015 are similar to previous years with no significant increase or decrease. Notably, two threatened owl species, the Powerful Owl and Masked Owl were detected in 2015 for the second consecutive year after several years of absence.

The usage rate recorded in 2015 of nest boxes installed in 2005 was 74% which has plateaued since peaking in 2012, suggesting the nesting boxes are at carrying capacity. However, the number of unavailable nesting boxes (due to broken lids, termite infestation, or destruction by weather) continued to increase from 23% in 2014 to 33% in 2015. Maintenance of the boxes will be undertaken in 2016.

Overall findings of the 2015 monitoring concluded that there have been no significant impacts on floristic or fauna diversity within the Donaldson Bushland Conservation Area over the last 15 years.

Reportable Incidents

No reportable incidents were recorded during the 2015/16 reporting period.

6.8 HERITAGE

The following section outlines the commitment made by Donaldson for the protection of cultural and natural heritage of the area. A copy of a plan along with a summary table showing the known Aboriginal Cultural heritage sites is attached as **Appendix 2** of this report.

To date thirty-one (31) sites of Aboriginal Cultural Heritage have been identified on property owned by Donaldson. None of these sites were in areas that were impacted on by site activities during the 2015/16 reporting period.

No European heritage sites have been identified at the mine.

Archaeological Studies

The mine has been the subject of four archaeological studies since 1998. During each study the principal aims have been to:

- Consult and involve the Aboriginal Community at every stage of the investigation and to provide continuous opportunities for the Aboriginal Community (through the Mindaribba Local Aboriginal Land Council [MLALC]) to participate in the interpretation and decision making process;
- Identify and record by field survey the material evidence of Aboriginal cultural heritage or locations of potential evidence with the land owned by Donaldson;
- Assess the archaeological significance and understand the Aboriginal significance of material evidence of Aboriginal cultural heritage of the study area; and,
- Assess the impacts of the mine on Aboriginal Cultural Heritage.

Management

In accordance with Conditions 84, 85 and 86 of the Development Consent, Donaldson has prepared an Aboriginal Sites Management Plan for the mine. Separate plans were produced for each year of operation at the mine. This provided a better opportunity to address specific issues for each year as well as an opportunity to review and address the management of Aboriginal Sites both inside the mine impact area and within associated bushland areas surrounding the mine.

The following control measures have been employed at the mine in order to ensure that reasonable duty of care is taken to ensure sites of Aboriginal cultural significance are not knowingly disturbed or destroyed:

- The MLALC is actively involved in the management of Aboriginal Sites at Donaldson; and,
- Representatives of the MLALC are invited on site to monitor clearing and topsoil stripping activities.

Performance

Donaldson and MLALC enjoy a good working relationship and to date there have been no complaints or incidents recorded in relation to the management of sites of Aboriginal cultural heritage.

Reportable Incidents

No reportable incidents were recorded during the 2015/16 reporting period.

7. WATER MANAGEMENT

7.1 SURFACE WATER

The Water Management Plan (Perrens, 2000) details the measures employed by Donaldson to ensure protection of surface water on and around the mine site. Surface water monitoring has been ongoing since June 2000. A plan showing the location of the water monitoring sites is provided in **Appendix 1**. Routine sampling and analysis is undertaken at six (6) permanent surface water stream monitoring locations, when in flow. Opportunistic samples are also taken from various other locations around the mine area as required (sediment dams and mine water storage dams). The surface stream water monitoring sites include:

- Four Mile Creek Upstream (EM1);
- Four Mile Creek Downstream (EM2);
- Scotch Dairy Creek Upstream (EM3);
- Scotch Dairy Creek Downstream (EM4);
- Weakley's Flat Creek Downstream (EM5); and,
- Weakley's Flat Creek Upstream (EM6).

Samples collected from the six existing stream sites are analysed for Electrical Conductivity (EC), pH, Total Dissolved Solids (TDS), Total Suspended Solids (TSS) and Sulfates (SO₄), on a monthly basis. A full suite analysis is also carried out on a quarterly basis and includes analysis for Electrical Conductivity (EC), pH, Total Dissolved Solids (TDS), Total Suspended Solids (TSS), Sulfates (SO₄), Calcium (Ca), Magnesium (Mg), Sodium (Na), Potassium (K), Chloride (Cl), Fluoride (F), Arsenic (As), Aluminium (Al), Barium (Ba), Cadmium (Cd), Cobalt (Co), Copper (Cu), Chromium (Cr), Iron (Fe), Manganese (Mn), Lead (Pb), Zinc (Zn), Total Alkalinity as CaCO₃, Turbidity, Nitrates and Phosphates (total).

In addition to the physical and chemical water quality work, biological monitoring (macroinvertebrates) has been ongoing as part of the environmental impact assessment. The program consists of:

- A pre-mining baseline survey;
- A construction survey; and,
- Twice yearly operational surveys.

Two monitoring surveys were completed during the reporting period, namely during March and September 2016.

Environmental Management

The following control measures are employed at Donaldson in order to ensure an appropriate level of protection to surface water on and around the mine site:

- Minimal disturbance;
- Source separation in order to separate water of differing quality;
- Collection and containment of mine water for dust suppression; and,
- Grey water and sewerage is treated by bio-cycle technology.

In addition to these general measures, erosion control / stabilisation works were completed within the drainage channel to 'Brown's Hole'. Regular inspections of drainage channels and structures were undertaken throughout the reporting period. No additional stabilisation or remedial works were required.

Environmental Performance

There were no water-related complaints received during the 2015/16 reporting period.

Chemical and Physical Monitoring

A summary of three key parameters, required by the EPA Environment Protection Licence, for the reporting period as well as the pre-mining baseline is included in **Table 7.1** (this baseline is utilised in lieu of specific water quality predictions within the EIS). Monitoring results for pH and EC since the year 2000 are also presented graphically in **Figure 7.1** to assist in identifying trends.

Table 7.1
Summary of Surface Water Quality Monitoring Results – 2015/2016

Sample Site	Pre-mining	2015		2016									
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Rainfall (mm)													
-	-	69.8	103.8	430.8	26	78	31.8	13.4	113	44.2	74.2	60	43.8
pH													
FMCU	6.70 - 7.44	7.52	7.15	6.65	7.19	7.17	7.36	6.97	6.80	7.30	7.45	7.34	7.37
FMCD	6.40 - 7.73	7.4	7.58	7.08	7.30	7.80	8.07	7.65	7.60	7.67	8.06	7.81	7.80
SDCU	5.90 - 6.81	6.53	6.76	5.94	6.12	6.77	7.14	6.54	6.08	6.19	6.09	6.09	6.53
SDCD	5.80 - 6.80	6.16	6.53	6.09	5.9	6.65	6.82	6.63	6.37	6.3	6.26	6.28	6.68
WFCU	6.60 - 7.49	6.79	7.49	6.52	7.38	6.87	8.02	7.33	7.4	7.44	7.65	7.79	7.58
WFCD	6.40 - 7.28	Dry											
Electrical Conductivity (µS/cm)													
FMCU	265 – 522	232.5	208.3	200.9	259	289	229.5	226	176.3	169.7	173.2	197.4	194.9
FMCD	120 - 265	148.9	175.1	208.2	193.6	183.2	133.8	133.6	142.9	158.1	148.8	134.5	172.8
SDCU	71 - 200	221.8	242.1	196.6	182.2	195.4	134.9	137.3	143.1	150.7	229	218	226
SDCD	145 - 270	189.9	207.5	167.8	200.6	244.1	109.5	114.3	76.3	128.8	178.8	130.4	127.1
WFCU	200 - 310	145.8	285	256	207.7	166.3	172.5	142.7	142.8	134.4	221	175.4	179.4
WFCD	230 - 546	Dry											
Total Suspended Solids (mg/L)													
FMCU	32 - 180	<5	14	<5	<5	18	5	<5	<5	<5	<5	<5	5
FMCD	2 - 32	<5	<5	<5	<5	<5	<5	<5	18	10	<5	17	<5
SDCU	9 – 47	10	34	<5	10	27	<5	7	12	12	<5	9	25
SDCD	12 - 1283	8	26	<5	24	26	30	34	32	46	36	28	10
WFCU	1 – 3	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8	<5
WFCD	3 - 17	Dry											

During the reporting period, pH values were all above the lowest pre-mining pH levels except for two upstream results which were between 0.05 and 0.08 pH units lower than the pre-mining level. The pH of all samples were within the recommended ANZECC Guideline (pH 6.5 – 9.0) for fresh and marine waters for the protection of aquatic ecosystems, apart from Scotch Dairy Creek Upstream and Downstream which are slightly below the lower guideline but consistent between upstream and downstream samples. The pre-mining pH levels for Scotch Dairy Creek Upstream and Downstream were also slightly below the ANZECC Guidelines (pH 6.5 – 9.0). As such, it appears that the activities of the mine in this reporting period have not affected the pH of the surrounding stream environments.

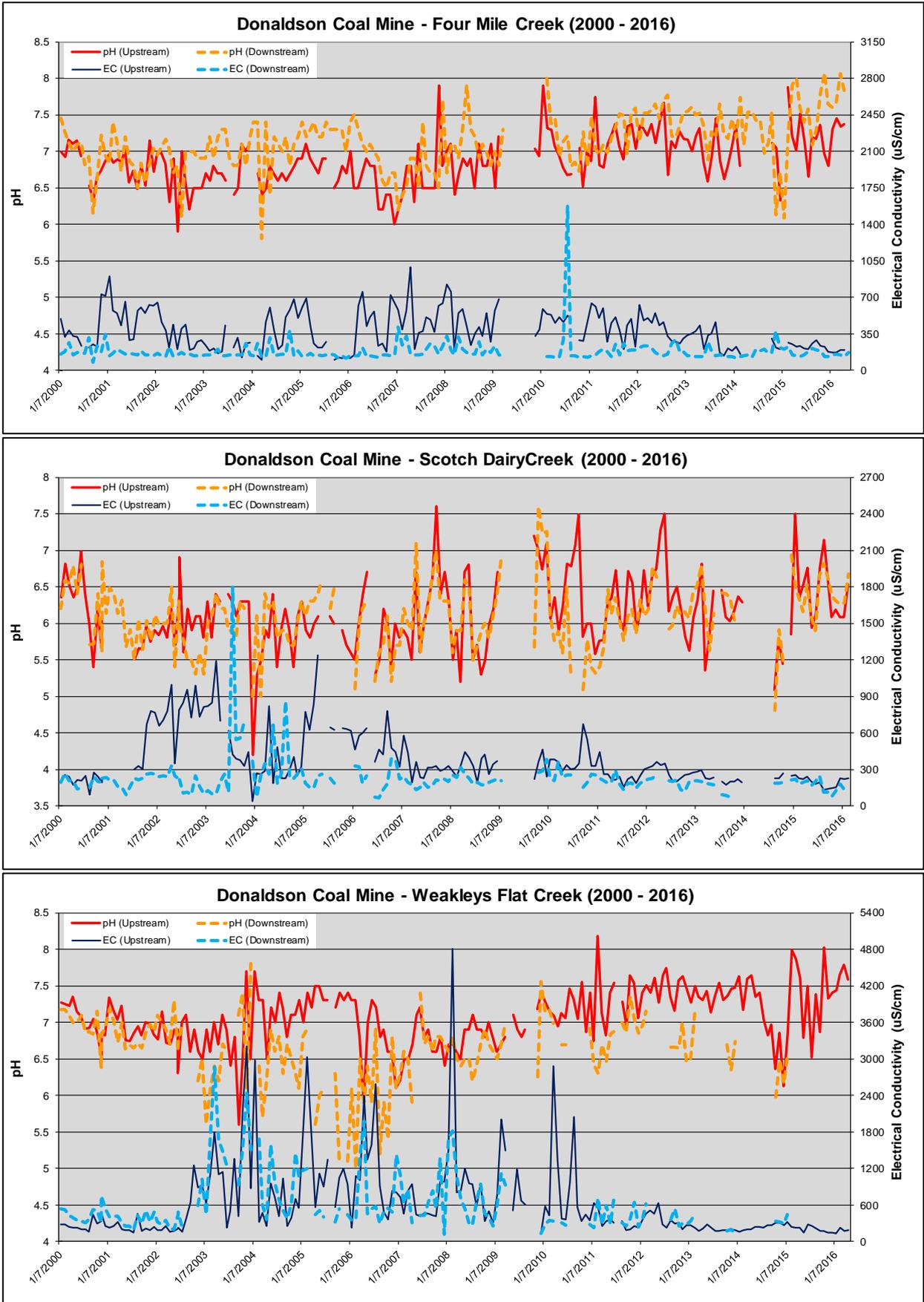


Figure 7.1 Surface Water Monitoring – 2000 to 2016

As can be seen in **Figure 7.1**, since regular monitoring began in the year 2000, the lower pH for both upstream and downstream monitoring has regularly exceeded the pre-mining levels. However, the higher and lower trends in the downstream results generally reflect a similar trend in the upstream results. Lower pH's appear to be correlated to periods of low flow within the creeks and could be the result of acidification from the surrounding soils which naturally have a pH in the order of 4.5 to 4.8 (GSS, 2015).

The Department of Planning & Environment has previously noted that the lowest pH value recorded in Scotch Dairy Creek Downstream was 4.81 (28/04/15). However, as can be seen from **Figure 7.1**, the corresponding Scotch Dairy Creek Upstream sample pH was 5.08. These results were recorded following a period of 6 out of 7 months of no flow conditions. Both upstream and downstream pH results subsequently trended higher following rainfalls in April 2015 (see **Figure 7.1**). Therefore, it is not considered likely that the mine is resulting in a significant effect on the downstream pH. Notably, the lowest recorded Scotch Dairy Creek Upstream sample pH was 4.2 (18/08/04) which is lower than the 2015 downstream sample and demonstrates that this creek system has naturally low pH fluctuations.

During the reporting period, the mean EC values were reasonably similar to the pre-mining values being slightly higher or lower at each site. Since monitoring commenced in the year 2000, at the Four Mile Creek and Scotch Dairy Creek sites, with a few exceptions, the EC at the downstream sites has been consistently lower or similar to the upstream sites (see **Figure 7.1**). No downstream samples for Weakleys Flat Creek were able to be collected during the reporting period due to dry conditions. However, previous monitoring results show that both the upstream and downstream EC levels vary to a substantially greater extent than the Four Mile and Scotch Dairy Creek sites. Overall, the available results suggest that the mine is having a negligible impact on the EC of surface waters in the surrounding area.

During the reporting period, the annual mean TSS values at monitoring locations were generally similar to the respective pre-mining levels apart from substantially lower values at Scotch Dairy Creek Downstream. Both the average and highest TSS values, the highest being 46mg/L recorded at Scotch Dairy Creek Downstream, are below the standard TSS criteria of 50mg/L. These results suggest that the mine is having a negligible impact on the TSS of surface waters in the surrounding area.

Biological Monitoring

Assessment of stream fauna is used to assess areas of environmental stress through the diversity of the macroinvertebrate population and the presence of pollutant sensitive or pollutant tolerant species. Macroinvertebrate monitoring was undertaken in autumn (March 2016) and spring (September 2016). Six sites are targeted on the three major tributaries traversing the mine site. **Table 7.2** and **Table 7.3** include the results for the reporting period whilst **Figure 7.2** provides a graphical summary of the results since monitoring commenced in the year 2000. It is noted that the use of the SIGNAL2 index has been adopted in 2015 and results in a lower score than the original SIGNAL index utilised in previous monitoring.

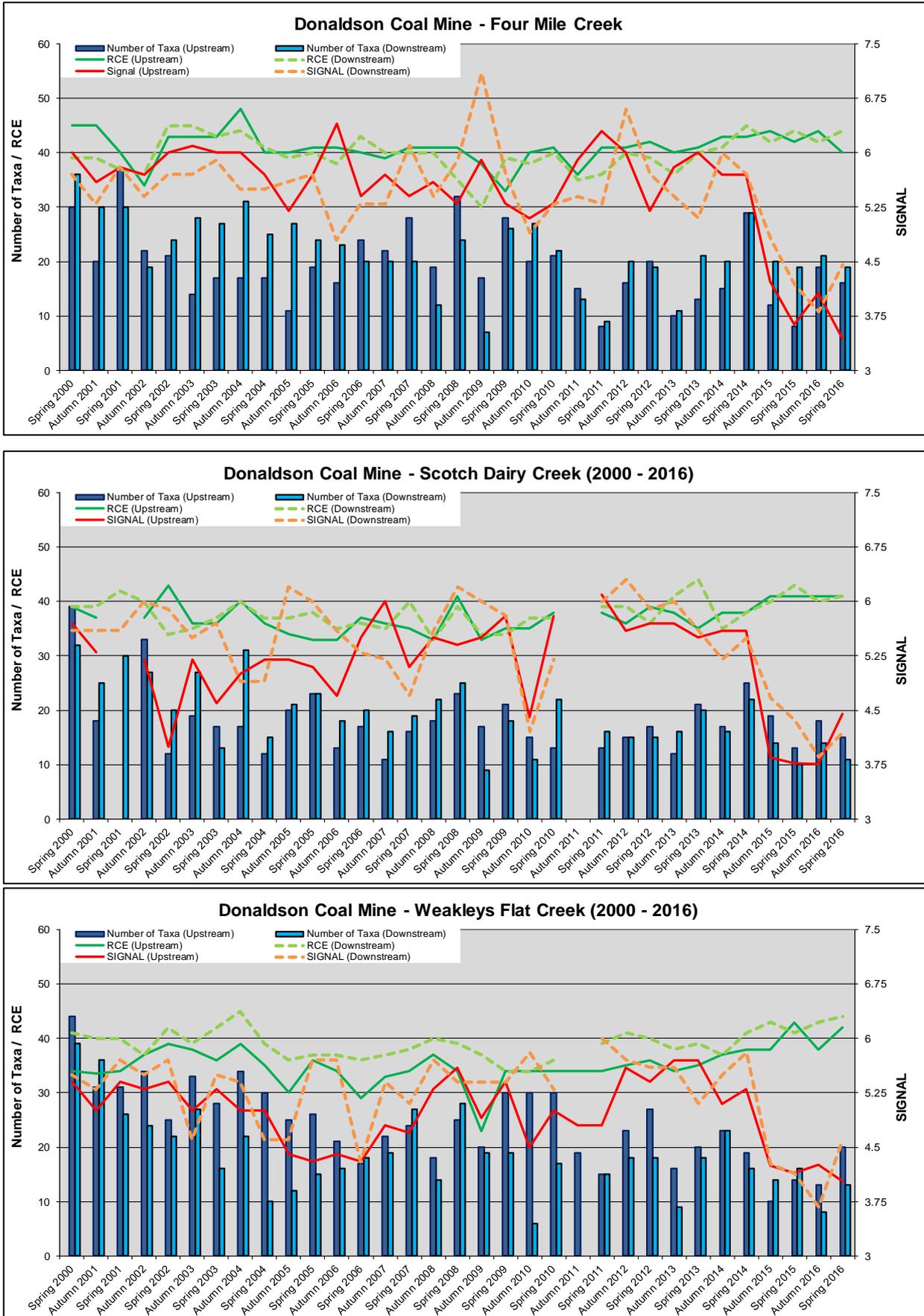


Figure 7.2 Biological Monitoring – 2000 to 2016

Table 7.2
Macroinvertebrate Monitoring Diversity and Signal Index - 2016

Site number	Number of Taxa		SIGNAL2		SIGNAL2 weighted	
	Autumn	Spring	Autumn	Spring	Autumn	Spring
SDCU	18	15	3.72	3.93	3.76	4.45
SDCD	14	11	3.57	4.09	3.85	4.19
WFCU	13	20	4.62	4.1	4.26	4.03
WFCD	8	13	3.63	4.23	3.67	4.6
FMCU	19	16	3.58	3.38	4.06	3.44
FMCD	21	19	4.14	4.11	3.81	4.46

The streams in the study area tended to show moderate diversity of fauna indicative of fair water quality. However all sites were populated by several pollutant sensitive families of invertebrates. Whilst fluctuating over time, there does not appear to be a specific trend or divergence between upstream and downstream sites. Similarly, in most instances, the SIGNAL index between upstream and downstream sites appear to general follow similar patterns over time without a specific trend or divergence (when taking into account the use of SIGNAL2 scoring from 2015). Where slight differences do occur, there is no obvious physical disturbance (erosion, sedimentation, altered habitat, poor water quality) that may explain this. It is likely that these differences are a result of the natural variability of the ephemeral streams.

At each site a detailed field observation sheet was also completed covering riparian (stream bank) vegetation, stream geomorphology, visual characteristics and odour. A Riparian Channel Environmental (RCE) ranking was calculated following the assessment which evaluates the condition of the:

- Adjacent land,
- Banks,
- Channel & bed (includes in-stream vegetation and algae); and,
- Riparian vegetation.

Table 7.3 shows the RCE inventory scores of each site during the reporting period, whilst Figure 7.2 displays the scores recorded since the year 2000. An RCE score greater than 40 indicates a stream considered to be in good condition with potential for higher biodiversity values. RCE Scores of 20-40 indicate a stream is in moderate condition and below 20 indicates that the stream is in very poor condition.

Whilst fluctuations have occurred over time, the RCE scores during the reporting period remain similar to the baseline RCE scores with no particular trends or divergences. At the upstream sites, the lowest RCE scores recorded range between 23 and 33 and the highest between 43 and 48. At the downstream sites, the lowest RCE scores recorded range between 30 and 33 and the highest between 44 and 45.

**Table 7.3
RCE Rankings - 2016**

Site	Scotch Dairy Creek upstream	Scotch Dairy Creek downstream	Weakleys Flat Creek upstream	Weakleys Flat Creek downstream	Four mile creek upstream	Four mile creek downstream
RCE Score Autumn	41	40	38	43	44	42
RCE Score Spring	41	41	42	44	40	44

Reportable Incidents

No reportable incidents were recorded during the 2015/16 reporting period.

7.2 GROUNDWATER

The Water Management Plan (Perrens, 2000) details the measures employed by Donaldson to ensure protection of groundwater on and around the mine site.

Groundwater monitoring has been ongoing since June 2000. The groundwater monitoring locations at the mine were reviewed by the (then) DEC (EPA) as part of the EPL license review. There are now seven (7) current monitoring sites, the locations of which are provided in **Appendix 1**.

Environmental Management

The groundwater piezometers are monitored to determine impacts on both Standing Water Levels (SWL) and groundwater quality. A regional site was included in the monitoring program, REG DPZ1. It is located in Avalon Estate approximately 1.2km to the north of the mine.

Samples collected from the seven (7) bores are analysed for Electrical Conductivity (EC), pH, Total Dissolved Solids (TDS), Total Suspended Solids (TSS) and Sulfates (SO₄), on a monthly basis. A full suite analysis is also carried out on a quarterly basis and includes analysis for Electrical Conductivity (EC), pH, Total Dissolved Solids (TDS), Total Suspended Solids (TSS), Sulfates (SO₄), Calcium (Ca), Magnesium (Mg), Sodium (Na), Potassium (K), Chloride (Cl), Fluoride (F), Arsenic (As), Aluminium (Al), Barium (Ba), Cadmium (Cd), Cobalt (Co), Copper (Cu), Chromium (Cr), Iron (Fe), Manganese (Mn), Lead (Pb), Zinc (Zn), Total Alkalinity as CaCO₃ and Turbidity.

The standing water level of each of the monitoring wells is measured each month, as metres below ground level.

Environmental Performance

There were no groundwater-related complaints received by Donaldson during the reporting period. In addition, monthly water monitoring results were routinely reviewed to determine whether there were any changes as a result of activities at the mine.

A summary of the three key parameters required by the EPL (pH, EC and the Standing Water Level) for the 2015/16 reporting period as well as the pre-mining baseline is included in **Table 7.4**. A graphical summary for each of these bores since monitoring commenced is also provided in **Appendix 6**.

Table 7.4
Summary of Groundwater Monitoring Results – 2015/2016

Sample Site	Pre-mining	Site Average ¹	2015		2016									
			Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
pH														
REG DPZ-1	NA	5.55	5.26	5.41	5.28	5.45	5.2	5.35	5.38	5.32	5.35	5.35	5.34	5.3
DPZ3	5.99 - 6.96	6.5	6.68	6.86	6	6.47	6.89	6.85	6.77	6.77	6.74	6.71	6.79	6.75
DPZ6	NA	6.6	6.83	6.81	6.72	6.64	6.67	6.72	6.8	6.7	6.68	6.68	6.73	6.9
DPZ8	5.46 - 5.66	4.86	3.02	2.98	3.06	3.06	3.17	3.16	3.13	2.99	3.22	3.38	3.06	3.04
DPZ10	6.48 - 6.97	6.72	6.6	6.82	6.33	6.85	6.86	6.71	6.78	6.72	7.05	6.84	6.66	6.83
DPZ13	6.67 - 7.22	7.0	6.9	7.15	7.03	6.89	6.99	7.13	6.99	6.99	7.09	6.98	7.06	7.06
Electrical Conductivity (µS/cm)														
REG DPZ-1	NA	1455	1745	1826	1841	1851	1995	1827	1814	1807	1802	1840	1873	1825
DPZ3	10200 - 11350	6721	10080	10410	863	1336	11150	11480	11640	6600	10210	10250	11260	11540
DPZ6	NA	3094	2450	2417	2425	2580	2650	2194	2550	2230	2390	2560	2480	2560
DPZ8	1690 - 1820	2358	2540	2560	2550	3040	2413	3060	2920	3180	2800	2360	2430	2870
DPZ10	3670	3482	3180	3180	3180	3180	3180	3180	3180	3180	3180	3180	3180	3180
DPZ13	12200 - 13750	11040	4350	5290	3060	3670	4410	4240	4840	4540	5310	4200	4040	4240
Standing Water Level (m below natural ground surface)														
REG DPZ-1	NA	31.2	20.5	20.53	20.18	20.09	20.07	20.27	20.28	20.33	20.34	20.39	20.37	20.48
DPZ3	12.05 - 11.51	11.1	10.21	10.31	10.32	10.4	10.39	10.45	10.41	10.47	10.38	10.2	10.08	9.97
DPZ6	NA	29.4	34.17	34.24	33.83	34.17	34.2	33.8	34.33	34.18	34.07	32.32	32.67	33.16
DPZ8	24.35	27.8	30.46	30.46	30.38	30.17	30.35	30.41	30.41	30.41	30.42	30.43	30.42	30.41
DPZ10	12.40	13.4	13.34	13.4	13.48	13.1	13.11	13.2	13.23	13.26	13.28	13.26	13.27	13.33
DPZ13	7.01 - 7.25	11.8	24.95	24.97	24.94	24.97	24.92	24.95	24.95	24.96	24.95	24.95	24.95	24.93

1. Since monitoring commenced at that site.

Appendix 6 also provides a commentary on the trends recorded for each of these bores with the relevant comments repeated as follows.

Standing Water Levels

REGDPZ-1: Regional control bore located in strata well below the Donaldson Seams. Shows gentle change in SWL in response to long-term rainfall pattern, declining gradually from 2000 to 2005 (a period of below average rainfall), and rising gradually from 2007 to 2013 (a period of slightly above average rainfall). Since 2013, has been more or less stable

DPZ3: Located in the open cut area and screened in coal measures below Donaldson Seam. An unexplained rise in water level was recorded from 2004 to 2010 and then a decline, apparently in response to mining from the Donaldson Open Cut. Current behaviour appears to be response to rainfall and natural recession.

DPZ6: Showed drawdown during latter stages of the Donaldson Open Cut and then more pronounced drawdown once development of the Abel Underground South Mains started in April 2008. A partial recovery was subsequently evident during 2013 to 2016, probably due to recovery within in the completed Donaldson Open Cut.

DPZ8: Screened in Donaldson and Big Ben Seams. Responded to mining in the Donaldson Open Cut in 2007 and then slight post-mining recovery. Water level steady in 2014-2016.

DPZ10: Screened in the Beresfield Seam. and shows modest open cut mining effect from 2001 to 2006, then modest recovery, and more recent response to Abel Underground mining from 2011.

DPZ13: Screened in Donaldson Seam overburden, and showed no response to open cut mining, but clear response to Abel Underground mining from early 2012. Groundwater level appears to have been below the bottom of the bore since 2013.

.Water Quality

Salinity varies over a wide range from bore to bore, but within each bore, salinity generally is quite stable over time. Some of the monitored bores have reported occasional outliers of significantly lower salinity (EC and TDS) which are likely due to ingress of rainwater temporarily lowering the salinity in the bore. This is particularly apparent at bores DPZ3 and DPZ6.

A downward trend in EC is observed at bores DPZ6 and DPZ13, starting in 2010 or 2011, which could be due to enhanced recharge following drawdowns in the coal measures as a result of open cut mining. The downward trend has levelled out from the start of 2015.

Conversely, a rise in EC was observed at DPZ8, starting in 2008 or 2009, which is almost certainly related to open cut mining. However, the EC in DPZ8 has not continued rising, having stabilised at about 1000µS/cm EC higher than pre-2008.

Apart from the EC rise in DPZ8 in 2008, the monitoring has not indicated any rising trend in salinity in any bore, apart from the regional control bore REGDPZ1, which is unrelated to any mining activity, and is probably a result of increased urbanisation.

Likewise, although there are some pH variations from bore to bore, the monitoring has generally reported consistent pH values at individual bores over the past 2-3 years. In the past, both DPZ3 and DPZ8 show changes in pH that are probably related to mining or associated activities.

The pH values reported from DPZ3 were generally in the range 6.5 to 7.0 until around 2006, when the pH started to be more erratic, and more frequent lower pH values than previously, possibly indicating slightly more acidic conditions. Since around May 2006, pH values at DPZ3 have been generally in the range 5.2 to 7.2, but with median and average values of 6.45 and 6.50 respectively, only slightly lower than pre-mining average and median values of 6.66 and 6.70 respectively.

The pH values reported from DPZ8 were generally in the range 5.0 to 6.5 until late 2007, when the pH started to be more erratic, and generally much lower than previously, indicating more acidic conditions. Water levels in DPZ8 dropped sharply in September 2007, at the same time that EC increased noticeably and pH started to be erratic and eventually fell to a much lower level. Since February 2009, pH values at DPZ8 have been generally in the range 3.0 to 4.5 albeit with a number of higher outlier values, but significantly lower than the pre-mining levels.

The open cut mining has probably exposed sulphides or other acid-forming minerals present in the coal seams or the interburden strata to oxidation, leading to the reduction in pH at the time that mining reached the vicinity of this bore.

Reportable Incidents

No reportable incidents were recorded during the 2015/16 reporting period.

8. REHABILITATION

8.1 REHABILITATION PERFORMANCE DURING THE REPORTING PERIOD

Assorted infrastructure was removed from site as part of the final rehabilitation project during the 2013/14 AEMR reporting period. This included the removal of fuel storage tanks, traffic control boom gates and a number of bitumen and dirt roads. Other rehabilitation works previously completed, as outlined in the Mine Closure Plan for Donaldson Open Cut, include the following.

- Excavation of waste rock and contaminated material to the west pit.
- Reshaping of the land surface to as near as possible to natural topography.
- Spreading of topsoil on reshaped surfaces.
- Spreading of a seed mix of local tree and shrub species, as well as fast growing, sterile groundcovers which grow rapidly to provide erosion control, of the remaining 27.7 ha of rehabilitated area.

The West Pit and Square Pit have been made safe and left for use by the Abel Underground Mine who will be responsible for their ongoing management.

No further areas remain to be rehabilitated as part of the Donaldson Coal Mine operation and no additional rehabilitation works were undertaken during the 2015/2016 reporting period.

Figure 8.1 shows the final landform and current revegetation status. A summary of the areas of total rehabilitation area is also provided in **Table 8.1**.

Table 8.1
Rehabilitation Summary (Cumulative)

Mine Area Type	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Next Reporting Period (Forecast)
	Year 14 (ha)	Year 15 (ha)	Year 16 (ha)
Total mine footprint	307.3	307.3	307.3
Total active disturbance	77.3 ¹	77.3 ¹	77.3 ¹
Land being prepared for rehabilitation	0	0	0
Land under active rehabilitation	230	230	230
Completed rehabilitation	0	0	0

Notes:
1. Includes 60.2ha for the Square Pit and West Pit and 17.1ha for other retained infrastructure. These areas are not being actively mined, however, final rehabilitation is not planned until future land use options are finalised.

The areas shown in **Table 8.1** are consistent with the approved MOP which states:

- the total 'active disturbance' would total ~78ha at both the beginning and end of the MOP term (comprising retained infrastructure areas, the Square Pit and West Pit); and
- 'land under active rehabilitation' would total ~230ha at both the beginning and end of the MOP term (comprising 220ha of revegetated land and 10ha of water management).

As outlined within the approved MOP, the 'active disturbance', which includes both the Square Pit and West Pit, and the water management areas are planned to be transferred to the Abel mining lease during the MOP term for ongoing mining uses, including stockpiling and receipt of washery rejects. These uses were also detailed in the 2013 modification (MOD3) of Project Approval 05_0136 for the Abel mine. Until this transfer is undertaken the rehabilitation security for these areas will continue to be held against Mining Lease 1461 issued for the Donaldson Coal Mine.

8.2 REHABILITATION MONITORING

An assessment of rehabilitation performance was previously conducted by Global Soil Systems and Kleinfelder in 2015 forming part of an ongoing assessment. The monitoring undertaken by Global Soil Systems includes one control plot in the remnant bushland (Plot 1) and six monitoring plots in the rehabilitated areas of the mine (Plots 2 to 7). The plots have been established for between 8 and 12 years. The monitoring techniques employed in the rehabilitation assessment were:

- General assessment of vegetation;
- 2m x 2m quadrat survey of plant numbers, vegetation cover and groundcover;
- 20m x 10m quadrat survey of tree/shrub numbers, canopy cover measurement, tree health and new plant species;
- Analysis of soil samples for pH, EC, nitrogen, potassium, phosphorus, sulphur, major cations, major anions, cation exchange capacity, exchangeable sodium percentage and total organic carbon;
- 50m erosion transect; and,
- Photographic record of plots.

The monitoring undertaken by Kleinfelder includes a total of eight monitoring plots, including one control plot, four nesting box plots and three general fauna monitoring plots. Monitoring commenced in 2008. The monitoring techniques employed in the rehabilitation assessment include:

- nest box occupancy rates;
- survey for presence of terrestrial mammals, bats, birds, amphibians and reptiles; and
- survey of woody debris.

The results of these assessment have been compared with the completion criteria adopted by Donaldson. These criteria cover soil quality, vegetation, growth rates, species diversity and stem densities. The assessment found that several of the rehabilitated areas have already met the completion criteria and that all rehabilitated areas assessed are on track to meet the required completion criteria. A summary of the results and outcomes of the surveys compared to the completion criteria are provided in **Table 8.2**.

Table 8.2
Status of Monitoring Against Completion Criteria - 2015

Feature	Completion Criteria	Current Status
General	Stable landform.	All monitoring plots were observed to be 'stable' with no signs of significant erosion.
	Effective drainage.	The rehabilitated areas are effectively drainage without pooling water.
	Resilience to drought episodes in rehabilitated area.	No signs of drought stress have been noted with trees considered healthy.
Flora	Re-establishment of a dense and diverse mixture of local native understory and overstorey vegetation species, specifically four overstorey and four understory species in each monitoring plot.	Plot 1 = 11 understory & 6 overstorey species. Plots 2 to 7 = 6 to 14 understory and 5 to 9 overstorey species.
	Limited presence of weeds.	Generally no to minimal weeds were observed, although weed numbers were observed to have increased in Plot 2.
	Tree/shrub densities of 3000 stems/ha after 5 years and 1000 stems/ha after 15 years.	Plot 1 = 4,500. Plots 2 to 7 range from 4,300 to 15,100.
	Evidence of natural regeneration in at least four species.	Natural recruitment was observed in most plots and evidence of flowering and seed production in some eucalypts and acacias.
Fauna	Reinvasion of rehabilitated area by native fauna.	The similarity of fauna diversity between the rehabilitation quadrats and the analogue site has increased from 20% similarity in 2011 to 40% in 2015. These results show that the rehabilitation areas are moving towards the remnant forest.
Soil Loss	Minimal erosion and soil movement, specifically soil loss from less than 40t/ha/year	Plot 1 = -40t/ha, Plot 2 = -40t/ha, Plot 3 = +60t/ha, Plot 4 = -50t/ha, Plot 5 = -90t/ha, Plot 6 = -30t/ha, Plot 7 = +40t/ha.
Soil Quality	Soil pH to be no lower than 10% of analogue plot pH after 5 years.	Plot 1 (analogue) – pH 4.5 to 4.8 Plots 2 to 7 – pH 4.6 to 5.2
	Conductivity of replaced soil to be below 900uS/cm after 5 years	EC for all plots ranged from 52 to 103uS/cm.
	Surface layer to be free of any hazardous material to a depth of at least 1m.	There has been no evidence of hazardous material following deep ripping.
	Runoff water conductivity to be less than 1 000uS/cm after 5 years.	Internal monitoring of the retained on-site sediment dams confirms ECs generally ranging between 100 and 200uS/cm with the highest result during the reporting period being 499uS/cm.
	Soil nitrogen and phosphorous levels to be within 20% of levels in analogue site after 5 years.	The phosphorous levels within all plots were the same as the analogue site, except for Plot 2 which recorded higher levels. However, the nitrogen levels within all plots, except Plot 2, were >20% less than the analogue site.
Pollution	Soil should not be a source of pollutants. Quality of water leaving the site to be in accordance with EPL requirements.	No non-compliance with EPL 11080 surface water quality requirements have been recorded and internal due diligence monitoring within the on-site sediment dams confirms that all measured ECs and the majority of pH and total suspended solid results during the reporting period would be compliant with discharge criteria.

Source: GSS (2015), Kleinfelder (2016), Donaldson Coal.

Natural recruitment was also evident in most plots and particularly older plots where canopy thinning, as a result of Acacia die back and the 2015 April severe storm, has resulted in more light reaching the forest floor. While some of these species appear to have originated from sown species other plants appear to have originated from re-spread topsoil and from introduction through natural vectors such as birds, wind etc. In

all sites there was evidence of flowering and seed production in some eucalypt species as well as Acacias although there is currently only minimal evidence of second generation eucalypts.

8.3 ACTIONS FOR THE NEXT REPORTING PERIOD

8.3.1 Rehabilitation

The primary activity planned to occur in the 2016/17 reporting period is the monitoring and maintenance of the final rehabilitation, as outlined in the Mine Closure Plan for Donaldson Open Cut. The West Pit and Square Pit have been left for use by the Abel Underground Mine who will be responsible for their ongoing management.

8.3.2 Monitoring

The environmental monitoring required to be undertaken at Donaldson Coal mine under the EPL, development consent and other regulatory documents will continue to be carried out in the 2016/17 reporting period.

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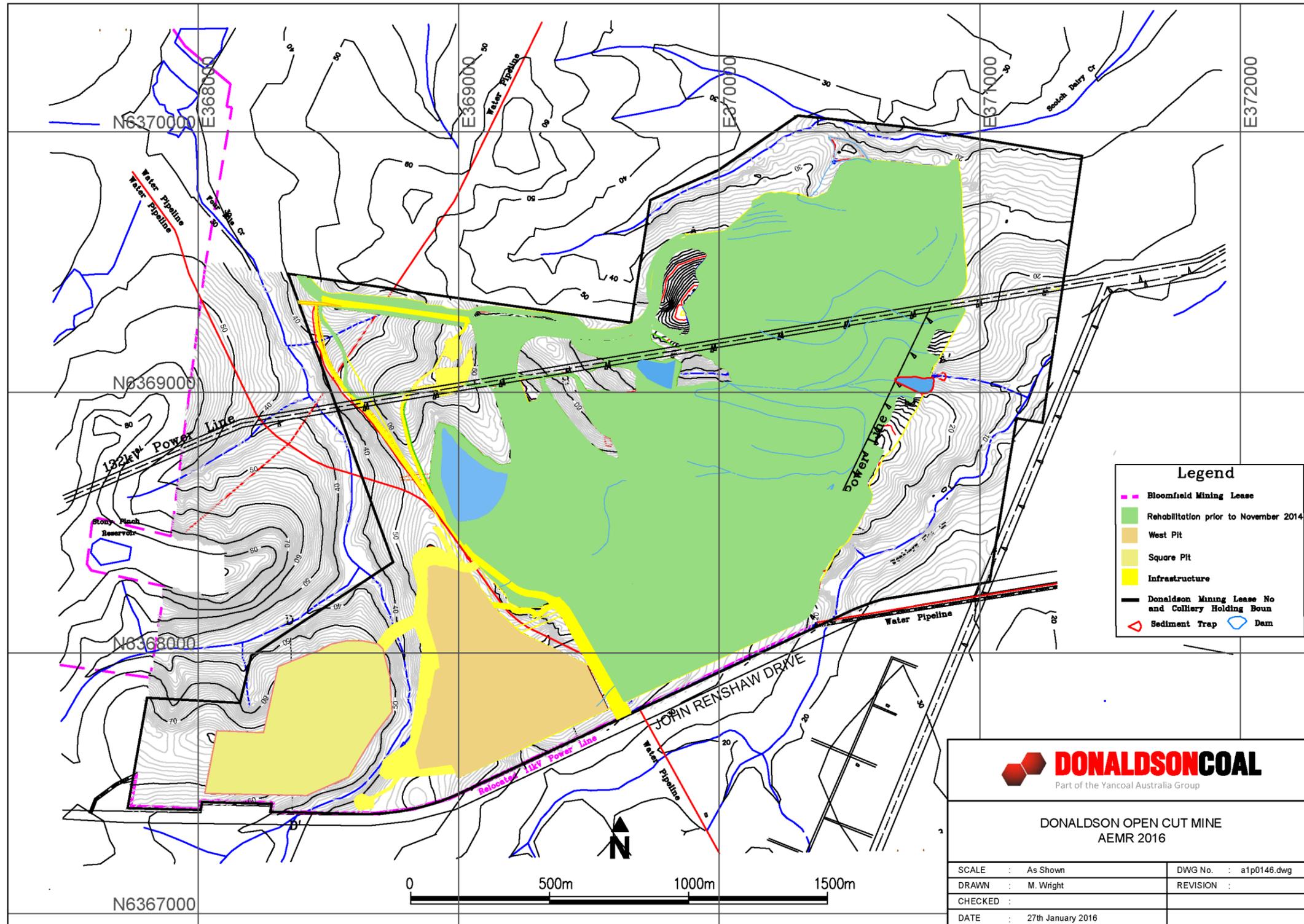


Figure 8.1
Status of Rehabilitation

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9. COMMUNITY

No complaints were received during the 2015/2016 reporting period. The last complaint was received on 31 January 2011. A summary of previous complaints is provided as **Appendix 4**. Given that mining and earthmoving activities have ceased and no complaints have been received for more than 5 years, no specific actions are currently deemed necessary.

In accordance with the conditions of the mine's development consent, the Company established a community consultative committee for the mine. The last committee meeting was held on 24 June 2009. No meetings were held during the reporting period and, with previous agreement of the CCC, further meetings are currently deemed unnecessary.

No other specific community engagement activities relating to the mine were undertaken during the reporting period.

10. INDEPENDENT AUDIT

No independent audit was undertaken during the reporting period. The last independent environmental audit of the mine was undertaken during March 2015. The audit found a high degree of compliance and identified the conditions of the development consent which were considered to remain active following the completion of mining. These remaining conditions have been treated as 'recommendations' and the status of these conditions outlined within the 2014/2015 AEMR and further updated in **Table 10.1**.

Table 10.1
2015 Independent Audit Recommendations & Status Update

Page 1 of 2

Cond No.	Development Consent Condition	Comment	Update
63(iv)	<p>Biological Monitoring The Applicant shall prepare and implement a detailed monitoring program for groundwater and surface water</p> <p>(iv) monitoring of macro-invertebrates and vegetation in accordance with protocols developed for the Hunter SIGNAL biological assessment criteria, with an assessment of inflows to the wetlands.</p>	The biological monitoring will continue in accordance with Development Consent condition 63(iv) "for a period of at least five years after the completion of mining, or other such period as determined by the Director-General."	Monitoring to be undertaken for period of 5 years from completion of mining (i.e. until April 2018).
69	<p>Tetratheca juncea Management Plan The Plan shall be consistent with the Flora and Fauna Management Plan and include measures for fire management.</p>	The ongoing control measures employed at the Donaldson Coal Mine site ensure a high level of conservation for the <i>Tetratheca juncea</i> .	The <i>Tetratheca juncea</i> area is contained within the Bushland Conservation Area (BCA). Refer to comment below.

Table 10.1 (Cont'd)
2015 Independent Audit Recommendations & Status Update

Cond No.	Development Consent Condition	Comment	Update
72(ii)	<p>Bushland Conservation Area Management</p> <p>(ii) retain management and ownership of the land for a minimum of 36 years from the commencement of construction, unless other arrangements are agreed in accordance with Condition 73; and</p> <p>(iii) prepare and implement a Management Plan for that area in consultation with OEH and to the satisfaction of the Director-General, during the period in which the Applicant is responsible for management.</p>	<p>Donaldson Coal Pty Ltd will retain management and ownership of the land for a minimum of 36 years from the commencement of construction, unless other arrangements are agreed in accordance with Development Consent condition 73.</p>	<p>The BCA is currently being managed in accordance with the BCA Management plan and will be maintained for the period as per Condition 73 (i.e. until January 2037 or as agreed).</p>
78 & 78A	<p>Rehabilitation</p> <p>The Flora and Fauna Management Plan shall also include a Rehabilitation Plan that details the measures to be undertaken to progressively rehabilitate disturbed areas of the mine to replicate the original vegetation cover that existed before mining occurred. The Applicant shall be responsible for the management and monitoring of the rehabilitated mine site until such time as the Director-General agrees that restoration has been successful.</p>	<p>The Rehabilitation Plan is included in the Mining Operations Plans (MOP) and amendments for the Donaldson Coal Mine. The current MOP is for May 2014 to May 2021.</p> <p>Recommendation:</p> <p>As the reporting on the Mining Operations Plan is required under the Mining Lease, the rehabilitation progress and monitoring will be reported to the DRE and it is recommended that approval be sought from DPE to submit this MOP report to DPE to satisfy this condition.</p>	<p>Currently the Annual Reviews are provided to both DRE and DPE and will continue to be provided.</p>
114	<p>ANNUAL ENVIRONMENTAL MANAGEMENT REPORT</p> <p>The Applicant shall prepare and submit an Annual Environmental Management Report (AEMR) throughout the life of the mine to the satisfaction of the Director-General. The AEMR shall review the performance of the mine against the Environmental Management Strategy and the Conditions of this Consent, and other licences and approvals relating to the mine.</p>	<p>The preparation of the Annual Environmental Management Report for the Donaldson Coal Mine will be required unless an exemption is obtained from the Director-General/Secretary of DPE.</p> <p>Recommendation:</p> <p>It should be considered that reporting on the rehabilitation progress, the biological monitoring and bushland conservation area could be achieved by submitting the expert consultant reports and placing the reports on the Donaldson Coal website.</p>	<p>The Company is continuing to prepare the full Annual Review, however, this recommendation will be further considered in future reporting periods.</p>

The Company is also continuing to consider a request for the cancellation of the remaining conditions which are no longer considered 'active' within the development consent and plans to submit a formal request to DPE during the next reporting period.

The next independent audit will be undertaken in 2018 unless otherwise agreed with the Secretary.

11. INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD

During the reporting period there were no:

- reportable incidents or exceedances; or
- official cautions, warning letters, penalty notices or prosecution proceedings.

One non-compliance was recorded against the conditions of ML 1461 relating to minimum employment or expenditure within the lease area. This requirement can be varied by the Minister at any time. Therefore, the Company will formally apply to DRE to suspend this requirement.

12. ACTIVITIES TO BE COMPLETED IN THE NEXT REPORTING PERIOD

As discussed in Section 11, an application will be submitted to DRE to formally suspend the minimum employment and expenditure requirements of ML 1461.

No specific measures are currently deemed necessary to improve environmental or community performance.

As outlined in Section 4.3, a range of monitoring, including surface water, groundwater, flora and fauna monitoring are planned during the next reporting period. This monitoring represents a continuation of standard monitoring practices and does not require update of existing management plans.

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