


Annual Review Sunnyside Coal Mine

Name of operation	Sunnyside Coal Mine
Name of operator	Whitehaven Coal Mining Pty Ltd
Development consent/project approval number	PA 06_0308
Name of holder of development consent/project approval	Namoi Mining Pty Ltd
Mining lease number	ML 1624
Name of holder of mining lease	Namoi Mining Pty Ltd
Water licence number	WAL 29537
Name of holder of water licence	Namoi Mining Pty Ltd
RMP start date	2 August 2022, reported on calendar year
Annual review start date	1 st January 2024
Annual review end date	31 st December 2024
<p><i>I, Daryl Robinson, certify that this audit report is a true and accurate record of the compliance status of Sunnyside Coal Mine for the period January 1st 2024 until December 31th 2023, and that I am authorised to make this statement on behalf of Namoi Mining Pty Ltd.</i></p> <p>Note. a) 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.</p> <p>b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</p>	
Name of authorised reporting officer	Daryl Robinson
Title of authorised reporting officer	Manager - Environment and Mine Rehabilitation Gunnedah Open Cut Operations
Signature of authorised reporting officer	
Date	25/03/2025

Contents

1	STATEMENT OF COMPLIANCE	6
2	INTRODUCTION.....	7
2.1	Mine Contacts.....	7
3	APPROVALS	9
3.1	Tenements, Licences, and Approvals	9
4	OPERATIONS SUMMARY	10
4.1	Mining Operations.....	10
4.2	Other Operations.....	10
4.2.1	Hours of Operations	10
4.2.2	Infrastructure Management.....	10
4.2.3	Exploration Drilling	10
4.3	Next Reporting Period	11
5	ENVIRONMENTAL PERFORMANCE	11
5.1	Air Quality	11
5.1.1	Criteria	11
5.1.2	Environmental Management Measures.....	13
5.1.3	Dust Monitoring	13
5.1.4	Key Environmental Performance/Management Issues	13
5.1.5	Proposed Improvements to Environmental Management	13
5.2	Biodiversity	13
5.2.1	Threatened Flora	13
5.2.2	Threatened Fauna.....	14
5.2.3	Ecological Monitoring.....	14
5.2.4	Weeds 20	
5.2.5	Feral Animal Control.....	20
5.2.6	Koala Management	20
5.2.7	Performance/Management Issues	20
5.2.8	Proposed Improvements to Environmental Management	20
5.3	Blasting	20

5.3.1	Proposed Improvements to Environmental Management	20
5.4	Operational Noise	20
5.4.1	Criteria	20
5.4.2	Environmental Management Measures.....	21
5.4.3	Noise Monitoring Results	21
5.4.4	Key Environmental Performance/Management Issues	21
5.4.5	Proposed Improvements to Environmental Management	21
5.5	Waste Management	21
5.6	Aboriginal Heritage Management	22
5.6.1	Environmental Management Measures.....	22
5.6.2	Consultation.....	22
5.6.3	Key Environmental Performance/Management Issues	23
5.6.4	Proposed Improvements to Environmental Management	23
5.7	Natural Heritage	23
5.8	Spontaneous Combustion	23
5.8.1	Environmental Management Measures.....	23
5.8.2	Key Environmental Performance/Management Issues	23
5.8.3	Proposed Improvements to Environmental Management	23
5.9	Bushfire Management	23
5.9.1	Environmental Management Measures.....	23
5.9.2	Key Environmental Performance/Management Issues	24
5.9.3	Proposed Improvements to Environmental Management	24
5.10	Environmental Performance Summary	24
6	WATER MANAGEMENT	25
6.1.1	Surface Water Management	25
6.1.2	Surface Water Monitoring Results	25
6.1.3	Key Environmental Performance/Management Issues	26
6.1.4	Proposed Improvements to Environmental Management	26
6.1.5	Water Take	26
6.2	Groundwater Management.....	26

6.2.1	Environmental Performance/Management.....	26
6.2.2	Groundwater Monitoring	26
6.2.1	Groundwater Levels	28
6.2.2	Groundwater quality	32
6.2.3	Groundwater Management.....	32
6.2.4	Key Environmental Performance/Management Issues	32
6.2.5	Proposed Improvements to Environmental Management	32
7	REHABILITATION	32
7.1	Rehabilitation Performance during the Reporting Period	32
7.1.1	Status of Mining and Rehabilitation	32
7.1.2	Post Rehabilitation Land Uses	33
7.1.3	Rehabilitation Monitoring	35
7.1.4	Weeds Management	35
7.1.5	Renovation or Removal of Buildings	35
7.1.6	Other Rehabilitation Undertaken.....	35
7.1.7	Departmental Sign-off of Rehabilitated Areas	35
7.1.8	Variations in Activities against RMP	35
7.1.9	Trials, Research Projects and Initiatives	35
7.1.10	Key Issues to Achieving Successful Rehabilitation	35
7.2	Actions for Next Reporting Period.....	35
8	COMMUNITY	36
9	INDEPENDENT AUDIT	39
10	INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD 39	
10.1	Reportable Incidents	39
10.2	Non-compliances	39
10.3	Regulatory Actions.....	39
11	ACTIONS TO BE COMPLETED IN THE NEXT REPORTING PERIOD 39	

TABLES

Table 1a Statement of Compliance.....	6
Table 1b Non-compliances.....	6
Table 1c Compliance status key for Table 1B	6
Table 3.1 Tenements, Licences and Approvals.....	9
Table 4.1 Production Summary.....	10
Table 5.6.2 Aboriginal Artefacts.....	22
Table 5.10 Environmental Performance	24
Table 6.1.2 Summary Surface Water Monitoring Results	25
Table 6.2.2 Groundwater Monitoring Points.....	26
Table 7.1.1 Rehabilitation Status	33
Table 8 Community Complaints.....	36

FIGURES

Figure 1 - Locality Plan	8
Figure 2 - Monitoring Sites.....	12
Figure 3 - Woodland surface cover at Sunnyside Coal Mine and Analogue sites.	15
Figure 4 - Woodland native grass cover at Sunnyside Coal Mine and Analogue sites.	16
Figure 5 - Woodland native mid-storey cover at Sunnyside Coal Mine and Analogue sites.	17
Figure 6 - Woodland native overstorey cover at Sunnyside Coal Mine and Analogue sites.	18
Figure 7 - Pasture surface cover at Sunnyside Coal Mine and Analogue sites.....	19
Figure 8 - Monitoring piezometer water depth.....	29
Figure 9 - Production bore water depth	30
Figure 10 - Production bore water depth, piezometer water depth and the monthly rainfalls.....	31
Figure 11 - Status of Mining and Rehabilitation	34

1 STATEMENT OF COMPLIANCE

The compliance status of the Sunnyside Coal Mine as of 31st December 2024 is summarised in [Table 1a](#). non-compliances that occurred during the reporting period are listed in [Table 1b](#).

Table 1a Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	
PA 06_0308 Consolidated	Yes
ML 1624	Yes
WAL 29537	Yes

Table 1b Non-compliances

Relevant Approval	Schedule (Condition) Number	Condition Description (summary)	Compliance status	Comment	Where Addressed in Annual Review
No non-compliances in reporting period					

Table 1c Compliance status key for [Table 1B](#)

Risk Level	Colour code	Description
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-compliant	Non-compliance with: <ul style="list-style-type: none"> Potential for serious environmental consequences, but is unlikely to occur: or Potential for moderate environmental consequences, but is likely to occur
Low	Non-compliant	Non-compliance with: <ul style="list-style-type: none"> Potential for moderate environmental consequences, but is unlikely to occur; or Potential for low environmental consequence, but is likely to occur
Administrative non-compliance	Non-compliant	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)

2 INTRODUCTION

This is the Fifteenth Annual Review (AR), formerly Annual Environmental Management Report, produced for the Sunnyside Coal Mine (SCM), and it has been prepared in accordance with Conditions 4 and 5 of Mining Lease (ML 1624) (Mining Act 1992) and Condition 5 (Schedule 5) of PA 06_0308 (consolidated). The AR follows the format required by the NSW Government Annual Review Guideline (October 2015).

Covering the period from 1st January 2024 to 31st December 2024 (the reporting period), where relevant the AR provides information on historical aspects of the operation and longer-term trends in environmental monitoring results.

The Sunnyside Coal Mine is located within the Gunnedah Shire, approximately 15 km west of Gunnedah. The mine is owned by Namoi Mining Pty Ltd (NMPL) and operated by Whitehaven Coal Mining Pty Ltd. Both companies are wholly owned subsidiaries of Whitehaven Coal Limited (WCL).

Mining and coal transporting operations at SCM ceased in May 2013, with recommencement of mining activities on 12th September 2017. Mining operations for coal ceased in August 2019, with coal crushing and transporting activities ceasing on the 27th of October 2019. Site activities are currently limited to aftercare, maintenance, water management and rehabilitation.

2.1 Mine Contacts

The management personnel responsible for operational and environmental performance at the SCM and their relevant contact details are as follows:

- Mr Daryl Robinson, Manager - Environment and Mine Rehabilitation Gunnedah Open Cut Operations - retains responsibility for activities at the site.
Contact: (02) 6740 7000.



Datum MGA2020 Zone 56 Author O.Hulbert
Image ArcGIS World Street Map Date March-25
Scale 1:238,000

SUNNYSIDE Regional Locality



Sunnyside Mine



ML1624

0 1.5 3 Kilometers



MSUN_015_Sunnyside_Regional_Locality

3 APPROVALS

3.1 Tenements, Licences, and Approvals

[Table 3.1](#) identifies the approvals in place for SCM at the end of the reporting period, the issuing / responsible Authority, dates of issue, expiry date and relevant comments.

Table 3.1 Tenements, Licences and Approvals

Issuing Responsible Authority /	Type of Lease, Licence, Approval	Date of Issue	Expiry	Comments
Department of Planning, Industry and Environment (DPIE)	Project Approval (PA) 06_0308	24th September 2008	Mining operations expired 5th November 2020, other conditions remain	PA modified December 2019 to update Annual Review period.
Environment Protection Authority (EPA)	Environment Protection Licence No. 12957	19th September 2017	N/A	Sunnyside EPA licence 12987 was surrendered on the 13th June 2023.
NSW Resource Regulator (RR)	ML 1624	5th November 2008	5th November 2029	
NSW Resource Regulator (RR)	Rehabilitation Management Plan	2 nd July 2022	N/A	Reviewed and reported against annually
Department of Primary Industry - Water	WAL 29537 (90WA822534)	27th April 2009	17th January 2025	Licence to be transferred
	90BL253767	9th Feb 2007	Perpetuity	Test
	90BL253768	9th Feb 2007	Perpetuity	Test
	90BL253769	9th Feb 2007	Perpetuity	Test
	90BL254686	26th Mar 2008	Perpetuity	Monitoring
	90BL254687	26th Mar 2008	Perpetuity	Monitoring
	90BL254688	26th Mar 2008	Perpetuity	Monitoring
	90BL254689	26th Mar 2008	Perpetuity	Monitoring
	90BL254690	26th Mar 2008	Perpetuity	Monitoring

4 OPERATIONS SUMMARY

4.1 Mining Operations

Mining operations during the reporting period included aftercare and maintenance of rehabilitation activities. [Table 4.1](#) presents the production summary at the end of the reporting period.

Table 4.1 Production Summary

Material	Approved Limit	Previous Reporting Period (actual)	This Reporting Period (actual)	Next Reporting Period (forecast)
Waste Rock/Overburden	4.9 M m ³	0	0	0
ROM Coal/Ore	1 Mtpa ²	0	0	0
Reject material	n/a	0	0	0
Saleable Product	n/a	0	0	0

³ Environmental Assessment

² PA 06_0308 Consolidated

4.2 Other Operations

4.2.1 Hours of Operations

Rehabilitation activities were undertaken during the reporting period within permitted operating times, i.e. 7:00am to 10:00pm Monday to Friday and 7:00am to 6:00pm on Saturdays, and not on public holidays.

4.2.2 Infrastructure Management

All fixed infrastructure has been dismantled and removed including demountable building, heavy vehicle tyres, generator water tanks, and the internal bitumen road. Remaining infrastructure includes the Koala fence, and an above ground poly water tank used for weed spraying.

4.2.3 Exploration Drilling

There was no exploration drilling undertaken during the reporting period.

4.3 Next Reporting Period

Site is currently in the Ecosystem and development phase of rehabilitation with activities focused on rehabilitation monitoring and maintenance.

5 ENVIRONMENTAL PERFORMANCE

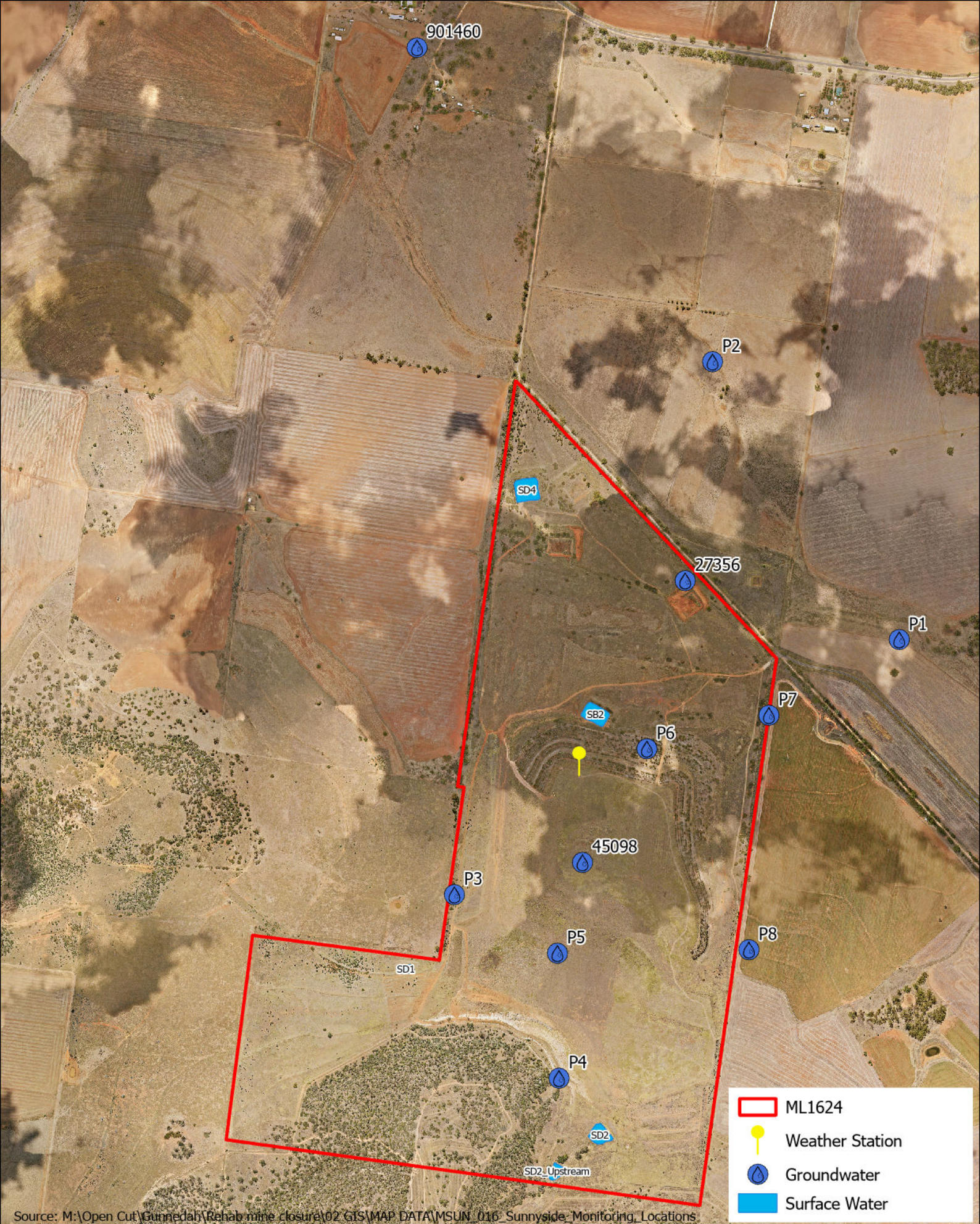
The following sub-sections document the implementation and effectiveness of the various control strategies adopted at SCM, together with monitoring data for the reporting period. Existing monitoring sites are given in Figure 2. Life of mine monitoring data is included as Appendices in this AR, where relevant, to allow for discussion on longer-term trends.

5.1 Air Quality

5.1.1 Criteria

Air quality criteria applicable to SCM are specified in PA 06_0308 (consolidated) Schedule 3, Tables 7, 8 & 9, which are summarised below. Monitoring ceased in August 2023 following the surrender of EPA licence 12987 on 13 June 2023 and approval of updated Air Quality Management Plan on 10 August 2023.

Air Quality Type	Criteria
Acceptable Mean Annual Increase in Deposited Dust	2 g/m ² /month
Mean Annual Dust Deposition (all sources)	4 g/m ² /month
Mean Annual Total Suspended Particulate (TSP) Matter (all sources) Concentration	90 µg/m ³
Mean Annual PM ₁₀ Particulate Level	30 µg/m ³
24hr Mean PM ₁₀ Particulate Level	50 µg/m ³



Source: M:\Open Cut\Gunnedah\Rehab mine closure\02 GIS\MAP DATA\MSUN_016_Sunnyside_Monitoring_Locations



Datum MGA2020 Zone 56 Author O.Hulbert

Image March-24 Date March-25 Size/Scale 1:14,500

SUNNYSIDE Monitoring Locations

0 165 330 Meters



MSUN_016_Sunnyside_Monitoring_Locations

5.1.2 Environmental Management Measures

Sunnyside rehabilitation has been completed for all disturbed areas and has good vegetation cover. No permanent mobile equipment is on site.

5.1.3 Dust Monitoring

Deposited Dust

The last samples were taken on the 15th of August 2023 following the surrender of EPA licence 12987 on the 13th of June 2023. Approval of the updated Air Quality Management Plan was accepted on the 10th of August 2023.

HVAS/PM10 Dust

The last samples were taken on the 15th of August 2023 following the surrender of EPA licence 12987 on 13th of June 2023. Approval of the updated Air Quality Management Plan was accepted on the 10th of August 2023.

5.1.4 Key Environmental Performance/Management Issues

No key environmental performance/management issues were identified during the reporting period.

5.1.5 Proposed Improvements to Environmental Management

No improvements are proposed within the next reporting period, as activities will be limited to aftercare and maintenance.

5.2 Biodiversity

5.2.1 Threatened Flora

Investigations into the occurrence of threatened flora within the Project Approval Area were undertaken as part of the Environmental Assessment by Geoff Cunningham Natural Resource Consultants Pty Ltd in 2007, following field surveys in October and December 2006. The investigation identified no significant impact on threatened flora species, endangered ecological communities, endangered flora populations or critical habitat as a consequence of the development, either because they do not exist in the area or avoidance is possible due to project design.

Investigations identified a remnant of the White Box Yellow Box Blakely's Red Gum Woodland endangered ecological community within the study area but concluded that it would not be affected in any significant manner by the mine.

A remnant of the Native Vegetation on Cracking Clay Soils of the Liverpool Plains endangered ecological community was also identified within the study area. It was noted that a small section of this community would be temporarily affected by the Coocooboonah Lane re-alignment but the community would be rehabilitated and enhanced following rehabilitation after mining ceases. It was assessed that this action, due to its temporary impact and final

environmental enhancement, would not require approval under the Commonwealth EPBC Act.

Much of the area has been cleared in the past and most of this cleared area has been cultivated. The vegetation on the cleared areas has been invaded by introduced species. The establishment of the mine site did not involve clearing of native vegetation and as such no biodiversity offsets were required.

5.2.2 Threatened Fauna

Investigations into the occurrence of threatened fauna within the Project Approval Area were undertaken by Kevin Mills and Associates as part of the Environmental Assessment, following surveys conducted in September 2006. These investigations identified that the proposed development was unlikely to significantly affect any of the threatened species, fauna populations or communities listed under the Threatened Species Conservation Act 1995, or their habitats.

It was also concluded that development of the mine was not likely to have a significant impact on any matter of national environmental significance listed under the *Environment Protection and Biodiversity Conservation Act 1999*. Referral to the Commonwealth Minister for the Environment for assessment and approval was therefore not warranted.

The area surrounding the mine site supports a viable koala population. NMPL has undertaken a number of measures to minimise the impacts on this population, including:

- Relocating the southern section of Coocooboonah Lane to avoid disturbing remnant koala habitat;
- Erecting a koala-proof fence around the active mine area;
- Minimising clearing and utilising local tree species for revegetation with an emphasis on koala feed trees. This has continued since the last reporting period with koala feed trees planted in koala corridor.

5.2.3 Ecological Monitoring

Introduction

Monitoring in the Woodland Domain comprised:

- eight repeat monitoring woodland rehabilitation sites
- one repeat monitoring analogue woodland site and
- two categorical rehabilitation point assessments at notable locations within the Woodland rehabilitation.

Monitoring in the Pasture Domain comprised:

- ten repeat monitoring pasture rehabilitation sites

- one repeat monitoring analogue pasture site and
- three categorical rehabilitation point assessments at notable locations within the Pasture rehabilitation.

Monitoring in the Conservation Domain comprised:

- eight categorical rehabilitation point assessments within locations mapped as tree seedling planting areas.

Woodland Domain – Surface cover

Surface cover represents the summed groundcover components of vegetation, litter, and mulch. This serves as an indicator of the rehabilitation objective for soil profile development in the RMP. To achieve the completion criterion target for this indicator, surface cover is to be greater than 85% during the Ecosystem Development Phase.

The rehabilitation did not achieve any of the phase-specific completion criterion targets for the indicator of surface cover in the Ecosystem Development Phase. Phase-specific targets currently do not apply to the rehabilitation seeded in 2019 and 2021

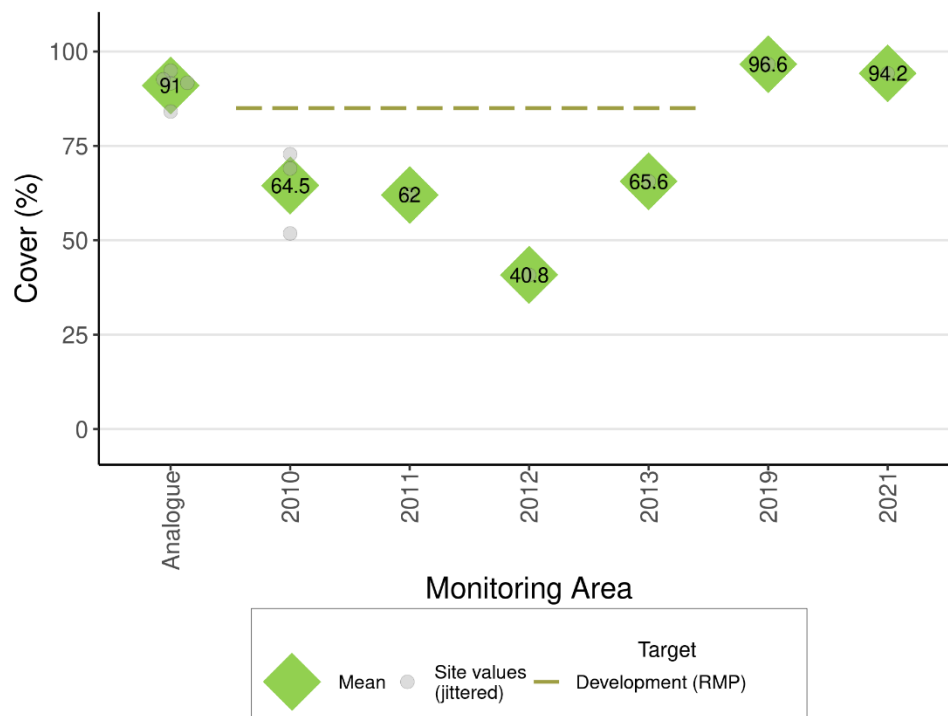


Figure 3 - Woodland surface cover at Sunnyside Coal Mine and Analogue sites.

Woodland Domain – Native Grass Cover

Native grass cover serves as an indicator of the rehabilitation objective for woodland re-establishment. To achieve the completion criteria targets for this indicator, the rehabilitation must fall within the 10th and 90th percentile range of analogue site values. In the 2024 monitoring year, the analogue sites' 10th–90th percentile range for native grass cover was 23.45%–64.5%.

The rehabilitation is yet to achieve the completion criterion target for the indicator of native grass cover.

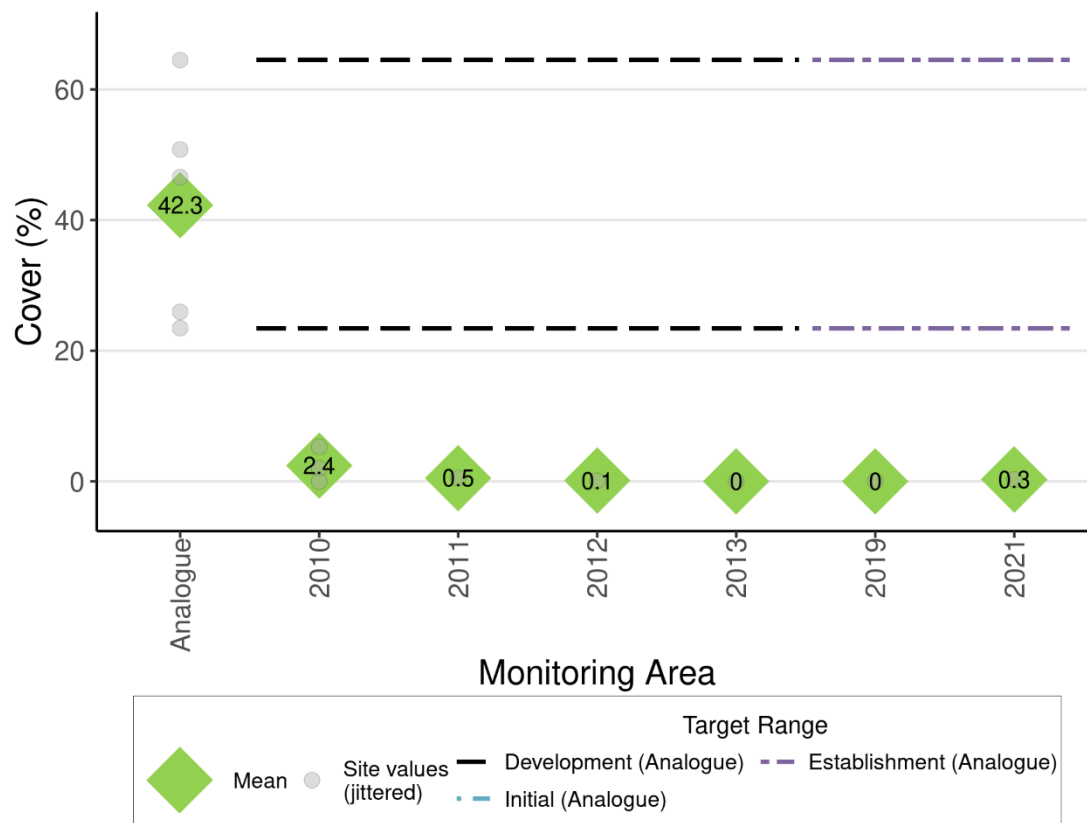


Figure 4 - Woodland native grass cover at Sunnyside Coal Mine and Analogue sites.

Woodland Domain – Native Mid-storey Cover

Native mid-storey cover serves as an Ecosystem and Land use Development Phase indicator of the rehabilitation objective for woodland re-establishment. To achieve the completion criteria targets for this indicator, the rehabilitation must fall within the 10th and 90th percentile range of analogue site values. In the 2024 monitoring year, the analogue sites' 10th–90th percentile range for native mid-storey cover was 1.6%–9.6%.

None of the rehabilitation areas achieved the phase-specific completion criterion targets for the indicator of native mid-storey cover.

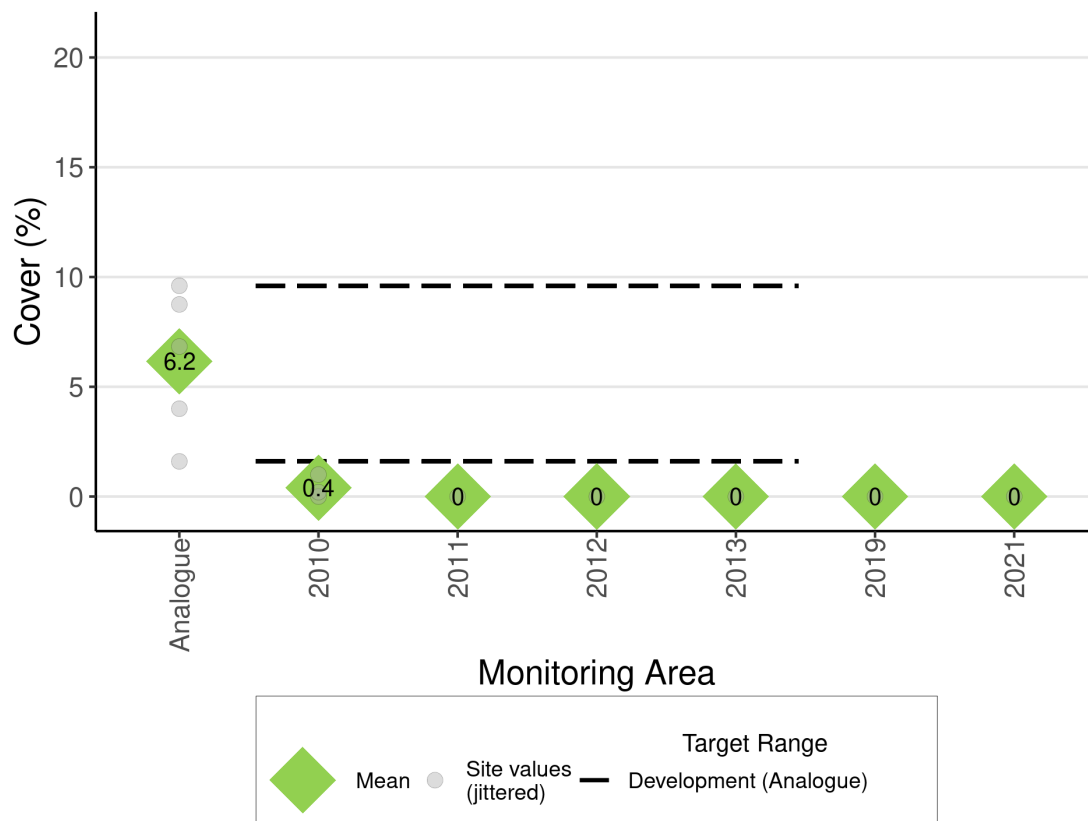


Figure 5 - Woodland native mid-storey cover at Sunnyside Coal Mine and Analogue sites.

Woodland Domain – Native Overstorey Cover

Native overstorey cover serves as an Ecosystem and Land use Development Phase indicator of the rehabilitation objective for woodland re-establishment. To achieve the completion criteria targets for this indicator, the rehabilitation must fall within the 10th and 90th percentile range of analogue site values. In the 2024 monitoring year, the analogue sites' 10th–90th percentile range for native overstorey cover was 5%–16.7%.

Only the rehabilitation established in 2013 met the phase-specific completion criterion target for this indicator. Whilst the 2010, 2011 and 2012 rehabilitation were all outside of the 10th–90th percentile range of analogue sites, notably, the 2011 and 2012 rehabilitation had

excessive overstorey cover compared to analogue sites. Phase-specific targets currently do not apply to the rehabilitation areas seeded in 2019 and 2021.

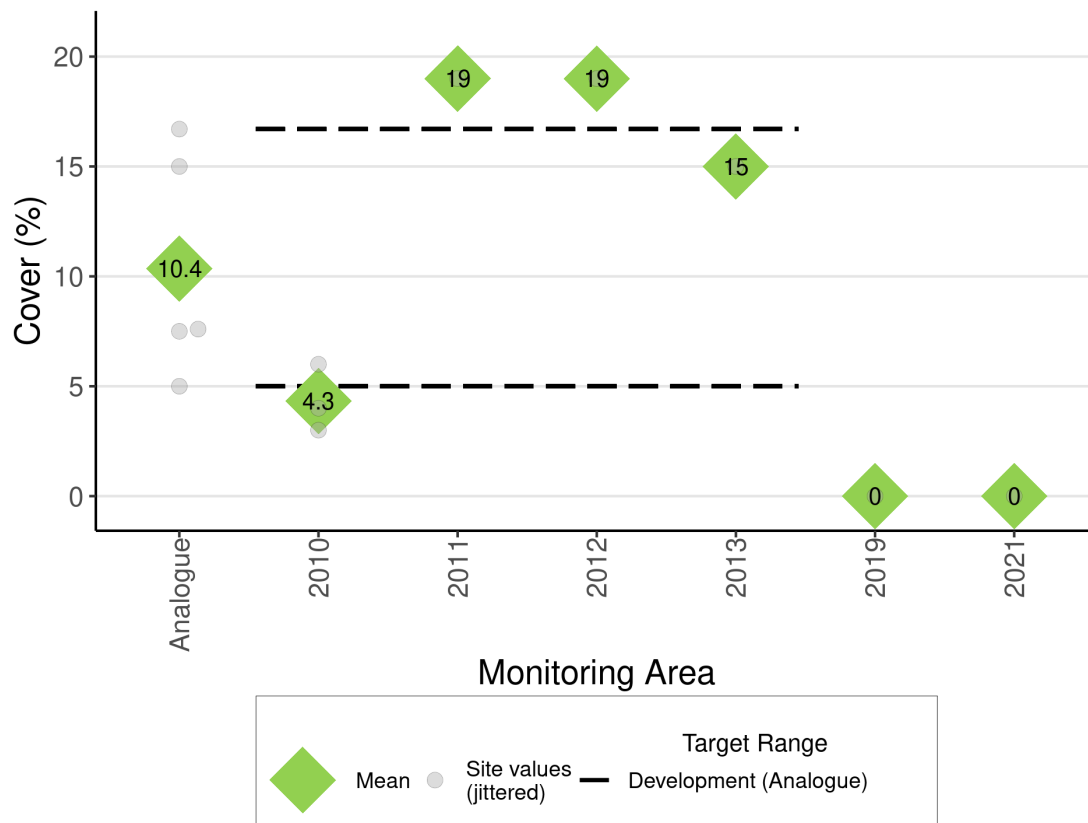


Figure 6 - Woodland native overstorey cover at Sunnyside Coal Mine and Analogue sites.

Pasture Domain – Surface Cover

Surface cover represents the summed groundcover components of vegetation, litter, and mulch. This serves as an indicator of the rehabilitation objective for soil profile development in the RMP. To achieve the completion criterion target for this indicator, surface cover is to be greater than 85%. Additionally, no bare surfaces greater than 20 m x 20 m in area or greater than 10 m in length down slope are to be present at year 5 following establishment.

In the 2024 monitoring year, both rehabilitation areas met the phase-specific completion criterion target for surface cover. No large bare surfaces were observed in monitoring sites located in rehabilitation areas established prior to 2019.

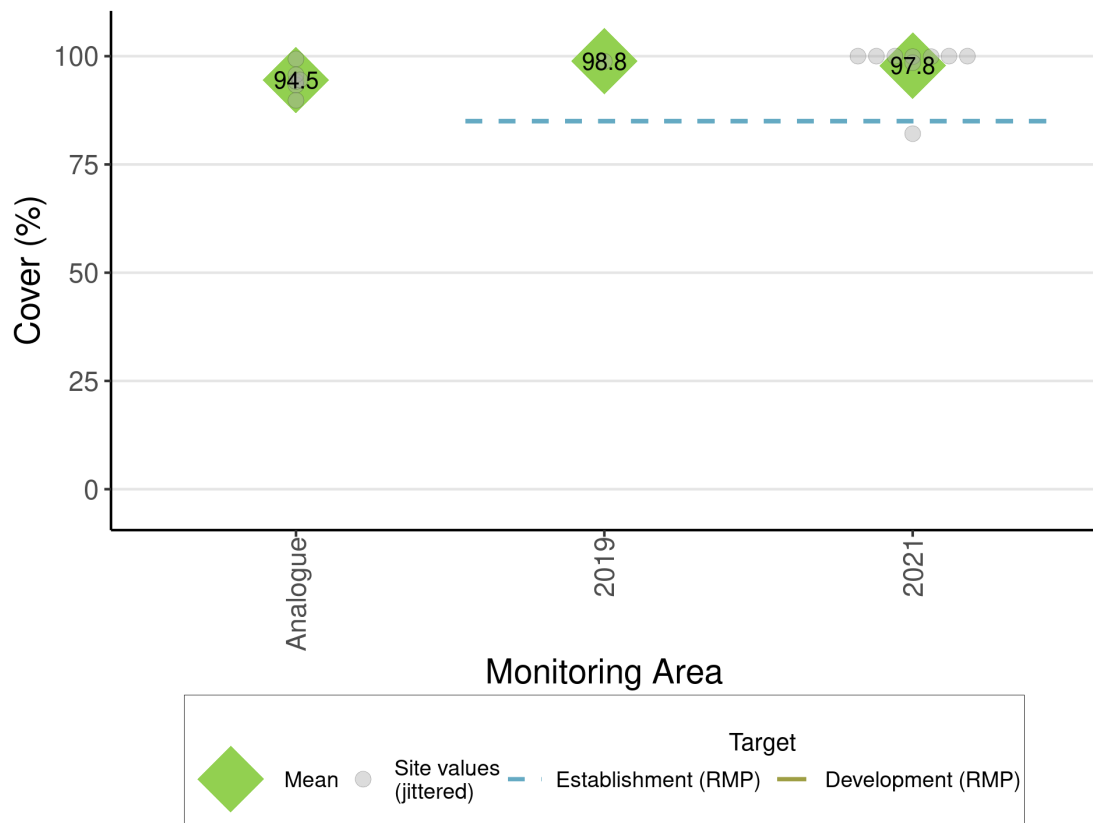


Figure 7 - Pasture surface cover at Sunnyside Coal Mine and Analogue sites.

Recommendations

It is recommended that:

- management actions are undertaken in the 2019 and 2021 woodland rehabilitation areas to increase native vegetation cover, particularly by sowing native grasses typical of PCT589;
- planting native shrubs such as *Geijera parviflora* (Wilga) and *Notelaea microcarpa* (Velvet Mock Olive) be undertaken in the 2010–2019 woodland rehabilitation; and
- weed management actions target:
 - *Cenchrus ciliaris* (Buffel Grass) in the 2019 and 2021 woodland rehabilitation;
 - exotic species as they may re-establish and any *Megathyrsus maximus* (Guinea Grass) and *Cenchrus ciliaris* (Buffel Grass) resprouting within the newly treated, ploughed and resown 2010, 2011, 2012 and 2013 woodland rehabilitation areas; and
 - *Megathyrsus maximus* (Guinea Grass), *Cenchrus ciliaris* (Buffel Grass) and *Carthamus lanatus* (Saffron Thistle) which are noted at high cover in the 2021 Pasture Domain.

5.2.4 Weeds

Contractors undertook weed inspections and treatment at Sunnyside Mine in reporting period. The main weeds treated on site were Broadleaf weeds, other weed species that were treated include Prickly lettuce, Buffel grass, Fleabane, Saffron thistle, Noogoora Burr and Johnson grass. Weed treatment was carried out using a spot spraying method and slashing where suitable.

5.2.5 Feral Animal Control

Feral animal control was undertaken within the mining lease utilised 1080 fox baits and Hoggone.

5.2.6 Koala Management

During the reporting period One koala was spotted at the Sunnyside Hill Offset in May, 2024; this was utilising infra-red drone technology.

5.2.7 Performance/Management Issues

No major issues.

5.2.8 Proposed Improvements to Environmental Management

In response to the recommendations outlined in section 5.2.3, Whitehaven Coal commit to the following;

- Continue field surveys to confirm areas of rehabilitation where infill planting is required. A re-planting plan will be developed and executed as required.
- In addition to annual ecological monitoring, rehabilitation will continue to be monitored monthly and reported on within the monthly inspection checklist, to ensure rehabilitation areas are reflecting species presence and abundance of analogue sites.

5.3 Blasting

There is no further blasting to occur on site.

5.3.1 Proposed Improvements to Environmental Management

No improvements are proposed for the next reporting period. All blasting at the mine site has ceased. Blast monitors have been decommissioned and removed.

5.4 Operational Noise

5.4.1 Criteria

Operational noise criteria for SCM are specified in PA 06_0308 and EPL 12957, as follows:

Table 5.4.1 Operational Noise Criteria

Location	Day	Evening
	L _{Aeq} (15 min)	L _{Aeq} (15 min)
All privately-owned land	35	35

5.4.2 Environmental Management Measures

Control of noise generation and propagation at the mine is by a combination of general source and propagation path methods including:

- There is no longer any bulk haulage or movement of material on site. Only activities are aftercare and maintenance
- No afterhours work carried out
- No general maintenance of equipment on site

5.4.3 Noise Monitoring Results

Approval to no longer carry out attended noise monitoring was received from the EPA and the Noise management plan was amended accordingly and was approved by DPIE in September 2020. There was no noise complaints registered for the reporting period and no attended noise monitoring was required.

5.4.4 Key Environmental Performance/Management Issues

Any maintenance or aftercare activities are to be within daylight hours.

5.4.5 Proposed Improvements to Environmental Management

None. There is no permanent equipment stationed on site. Any maintenance activities will be during day hours.

5.5 Waste Management

During the reporting period there were no activities onsite requiring additional material brought to site and no additional waste produced. There is no equipment onsite requiring maintenance monitoring. Due to no waste being generated by the site during the reporting period, there is no activity to base a comment on the effectiveness of the waste management process as defined in the Sunnyside Coal Mine Waste Management Plan.

All remaining waste was removed from site in 2022 and subsequently reported on in the 2022 AR.

5.6 Aboriginal Heritage Management

5.6.1 Environmental Management Measures

An assessment of the cultural heritage of the mine site was conducted by Archaeological Surveys and Reports Pty Ltd (ASR). Prior to the investigation, ASR contacted the Red Chief Local Aboriginal Land Council (LALC) and Bigundi Biame Gunnedarr Traditional People to arrange for site officers to assist in the survey. A representative from each group was present for the site survey conducted on the 12th September 2006 and the coal transport route survey on the 7th December 2006. The ASR assessment was used in the preparation of the Environmental Assessment for the mine, undertaken by R.W. Corkery & Co. Pty Ltd on behalf of Namoi Mining Pty.

Four sites were recorded during the investigation, as detailed in 7.5.2. Only one site (AGG1) was recorded within the mine site while the three isolated artefact sites were identified to the south of the mine site.

All Aboriginal Heritage sites are managed in accordance with the Sunnyside Coal Mine Aboriginal Cultural Heritage Management Plan, prepared in accordance with Schedule 3 Condition 32 of PA 06_0308 Consolidated.

5.6.2 Consultation

No soil stripping of previously undisturbed areas took place during the reporting period. No additional Aboriginal cultural heritage items were discovered during the reporting period and no consultation with Aboriginal stakeholders was conducted. Known heritage sites are listed in [Table 5.6.2](#).

Table 5.6.2 Aboriginal Artefacts

Site Name	Site Type	Site Description/Comments
Sunnyside AGG1	Axe Grinding Groove	Axe grinding groove at the rim of a cliff-like scarp (beside a small water-filled natural depression in the rock). Dimensions: 28cm (L) x 6cm (W) x 2cm (D). Located approximately 150m from the southern side of the open cut area.
Sunnyside ISO1	Isolated Artefact	Flake with possible retouch to one margin located on the bank beside the upper reaches of a dry creek (on a vehicle track). Dimensions: 21 x 12 x 3mm
Sunnyside ISO2	Isolated Artefact	Proximal fragment of a flake located on the bank beside the upper reaches of a dry creek. Dimensions: 22 x 22 x 5mm.
Sunnyside OS1	Artefact Scatter	Artefact scatter of at least ten artefacts in a lozenge-shaped area of 30 x 8m, on the upper slopes down slope of a contour bank down slope of a saddle. Artefact types: flakes and flaked pieces, including a backed blade.
Source: Modified after ASR (2007) – EA SCSC Part 7		

5.6.3 Key Environmental Performance/Management Issues

The preservation conveyor belt strip was removed from the axe grinding grove that is located south of the mine pit, as blasting is no longer taking place. Inspections found no impact on the heritage site.

5.6.4 Proposed Improvements to Environmental Management

No improvements are proposed within the next reporting period.

5.7 Natural Heritage

There are no features of natural heritage within the Project Approval area and hence, no specific management procedures are required.

5.8 Spontaneous Combustion

5.8.1 Environmental Management Measures

A carbonaceous test procedure was developed to identify and manage any carbonaceous material within 5m of the final landform. A total of 99 test pits to identify carbonaceous material with potential for spontaneous combustion were dug to at least 5m below final landform in 2020. All carbonaceous material is buried +5m below final landform.

5.8.2 Key Environmental Performance/Management Issues

No incidence of spontaneous combustion occurred.

5.8.3 Proposed Improvements to Environmental Management

As final rehabilitation has been completed and confirmation that there is no material with a potential for spontaneous combustion within 5m of the final landform, no further management activities are required.

5.9 Bushfire Management

5.9.1 Environmental Management Measures

SCM is located within an area of cleared agricultural land.

Measures to deal with bushfires include the following;

- Hot work permit system to manage activities that could potentially cause fire.
- Whitehaven Coal have engaged a firefighting contract company LRM Fire and Rescue on a retainer bases to assist in case of any fire breakout.

5.9.2 Key Environmental Performance/Management Issues

No key environmental performance/management issues were identified during the reporting period.

5.9.3 Proposed Improvements to Environmental Management

No improvements are proposed within the next reporting period.

5.10 Environmental Performance Summary

An environmental performance summary for SCM is presented in [Table 5.10](#).

Table 5.10 Environmental Performance

Aspect	Approval Criteria / EIS Prediction	Performance during the reporting period	Trend / Key Management Implications	Implemented / proposed management actions
Air Quality	Refer Section 6.1.1	Air quality monitoring ceased 2023. After surrendering EPA licence 12987 on 13 June 2023.	Nil. No ongoing monitored required after surrendering EPA licence 12987 on 13 June 2023.	Air quality monitoring ceased 2023. After surrendering EPA licence 12987 on 13 June 2023.
Biodiversity	EIS prediction of no impact on known koala population.	No recorded impact on koala population. No koala deaths recorded onsite.	Nil	Infill planting in woodland areas.
Heritage	EIS prediction of potential blast impact on a recorded site.	No recorded impact on site.	Nil	Blasting has ceased on site.
Spontaneous Combustion	EIS prediction of no material spontaneous combustion	No in-pit spontaneous combustion found during the year.	Nil	Nil.
Noise	35dB	No exceedances	Nil	Site activities limited to aftercare and maintenance.

Blasting	<115dB overpressure	No exceedances	Nil- all blasting has ceased.	Nil
----------	---------------------	----------------	-------------------------------	-----

6 WATER MANAGEMENT

The SCM lies within the catchment of the Namoi River. Most of the surface water runoff flows northwards across the mine site. It then flows into Coocooboonah Creek which flows north-west within a constructed waterway paralleling Coocooboonah Lane. From there, it flows into Rock Well Creek then into Native Cat Creek which continues to flow north-west for 6km. Runoff then flows northwards within Collygra Creek where it flows across a floodplain area before flowing into the Namoi River some 25km north of the Mine Site. The remainder of the mine's surface water flows south into Coocooboonah Creek ultimately flowing into the Namoi River to the north.

The design of sediment dams is to prevent off site runoff of water with TSS values above guideline levels. There are no longer any exposed surface areas on site generating high sediment runoff.

Two wet weather discharge points are nominated in the current EPL 12957. These are Storage Dam 3 (EPL ID No. 9) and Storage Dam 4 (EPL ID No. 10). Two additional monitoring points are nominated on the EPL for water quality monitoring during discharge events. These are Coocooboonah Creek Upstream (CCUS – EPL ID No. 11) and Coocooboonah Creek Downstream (CCDS – EPL ID No. 12).

6.1.1 Surface Water Management

All sediment basins, storage dams and associated banks and drains have been designed and constructed in accordance with the *Managing Urban Stormwater: Soils and Construction Vol 2E Mines and Quarries* (DECC, 2008) in conjunction with the references to Volume 1 (Landcom, 2004). 3 dams were decommissioned during 2024.

6.1.2 Surface Water Monitoring Results

SCM has a requirement to undertake surface water monitoring on a quarterly basis in addition to the monitoring of any wet weather discharge event.

Summary of water quality results are given in [Table 6.1.2](#), and complete surface water quality monitoring results are provided in Appendix 1. All surface water dams were dry when quarterly sampling was conducted during the reporting period. Production Bore dam and the Void was backfilled (Nov 2020) above groundwater level.

There were no discharges during the reporting period.

Table 6.1.2 Summary Surface Water Monitoring Results

Storage	No. Samples	Annual Average Oil and Grease	Annual Average Conductivity	Annual Average pH
		mg/L	µS/cm	
SD4	Dry during sampling			
Production Bore Dam	Dam removed			
Void	Dam removed; void is free draining			

SB4	Dry during sampling. Dam decommissioned Q4 2024.
SD3	Dry during sampling. Dam decommissioned Q4 2024.
SB2	Dry during sampling
SD2	Dam removed
SD1	Dry during sampling
SB5	Dry during sampling. Dam decommissioned Q4 2024.

6.1.3 Key Environmental Performance/Management Issues

No non-conformances or changes were made to surface water management program during the reporting period.

6.1.4 Proposed Improvements to Environmental Management

No improvements are proposed within the next reporting period.

6.1.5 Water Take

SCM groundwater licence (WAL 29537) is for 120 units from the Gunnedah - Oxley Basin. Licence is in the process of being transferred. There was no water take during the reporting period.

Water storage on site at end of reporting year was 0 ML as all dams were dry.

6.2 Groundwater Management

6.2.1 Environmental Performance/Management

The mine's performance with respect to groundwater performance/management, the prevention of pollution, and the assessment of impacts on groundwater availability to other surrounding users, has been assessed through groundwater level and chemistry monitoring undertaken at a series of piezometers and bores within the Project Area and adjacent properties.

6.2.2 Groundwater Monitoring

The details of groundwater monitoring throughout the reporting period are listed in [Table 6.2.2](#). Complete monitoring datasets are provided in Appendix 2.

Groundwater sampling and analysis was undertaken by Acirl Pty Ltd (ALS) during the reporting period. Below are some points to note regarding monitoring locations and frequencies:

- Bore 27356 has not been monitored since June 2012. The windmill located over the bore has been dismantled and removed from site.
- Standing Water Level (SWL) data is unavailable for bores 27356, 44884, 3709.
- Werona bore pump was last used in 2019. Since then, the bore pump and generator have been removed. As of March 2021, water levels were at 19.66 mbgl.

Table 6.2.2 Groundwater Monitoring Points

Site ID (see Figure 2)	Registered Bore No. & Licence No	Property/ Location	Frequency		Purpose
			SWL* ² , EC* ³ and pH	Representative Metals and Ions	
P1* ¹	GW968386 90BL253767	"Plainview"	Quarterly * ⁵	Six monthly * ⁵	To determine existing status and any impacts
P2* ¹	GW968387 90BL253768	"Ferndale"	Quarterly	Six monthly	
P3	GW968388 90BL253769	"Sunnyside"	Quarterly	Six monthly	
P7	GW968392 90BL254689	"Sunnyside"	Quarterly	Six monthly	To determine existing status and any impacts
P8	GW968393 90BL254690	"Sunnyside"	Quarterly	Six monthly	
3709* ¹	N/A	"Ivanhoe"	Quarterly * ⁵	Six monthly * ⁵	
22497* ¹	N/A	"Coocooboonah"	Quarterly	Six monthly	
44677* ¹	N/A	"Werona"	Quarterly * ⁵	Six monthly * ⁵	
44884* ¹	N/A	"Lilydale"	Quarterly	Six monthly	
6249* ¹	N/A	"Lilydale"	Quarterly * ⁵	Six monthly * ⁵	To determine existing status and any impacts
901460	GW901460 90BL249138	"Illili"	Quarterly * ⁵	Six monthly * ⁵	
27356	GW027356 90BL020042	"Sunnyside"	Quarterly* ⁵	Six monthly* ⁵	
45061	N/A	"Coocooboonah"	Quarterly * ⁵	Six monthly * ⁵	
Werona Production	90BL255246	"Werona"	Quarterly * ⁵	Six monthly* ⁵	
<p>*¹ Non-Company owned bore</p> <p>*² SWL – Standing Water Level</p> <p>*³ EC = Electrical Conductivity</p> <p>*⁴ Company production bore</p> <p>*⁵ – Not available this reporting period due to no access</p>					

6.2.1 Groundwater Levels

Groundwater levels have remained stable and reflect reduced rainfall and dryer climatic conditions. Mine void was closed and made free draining in December 2020.

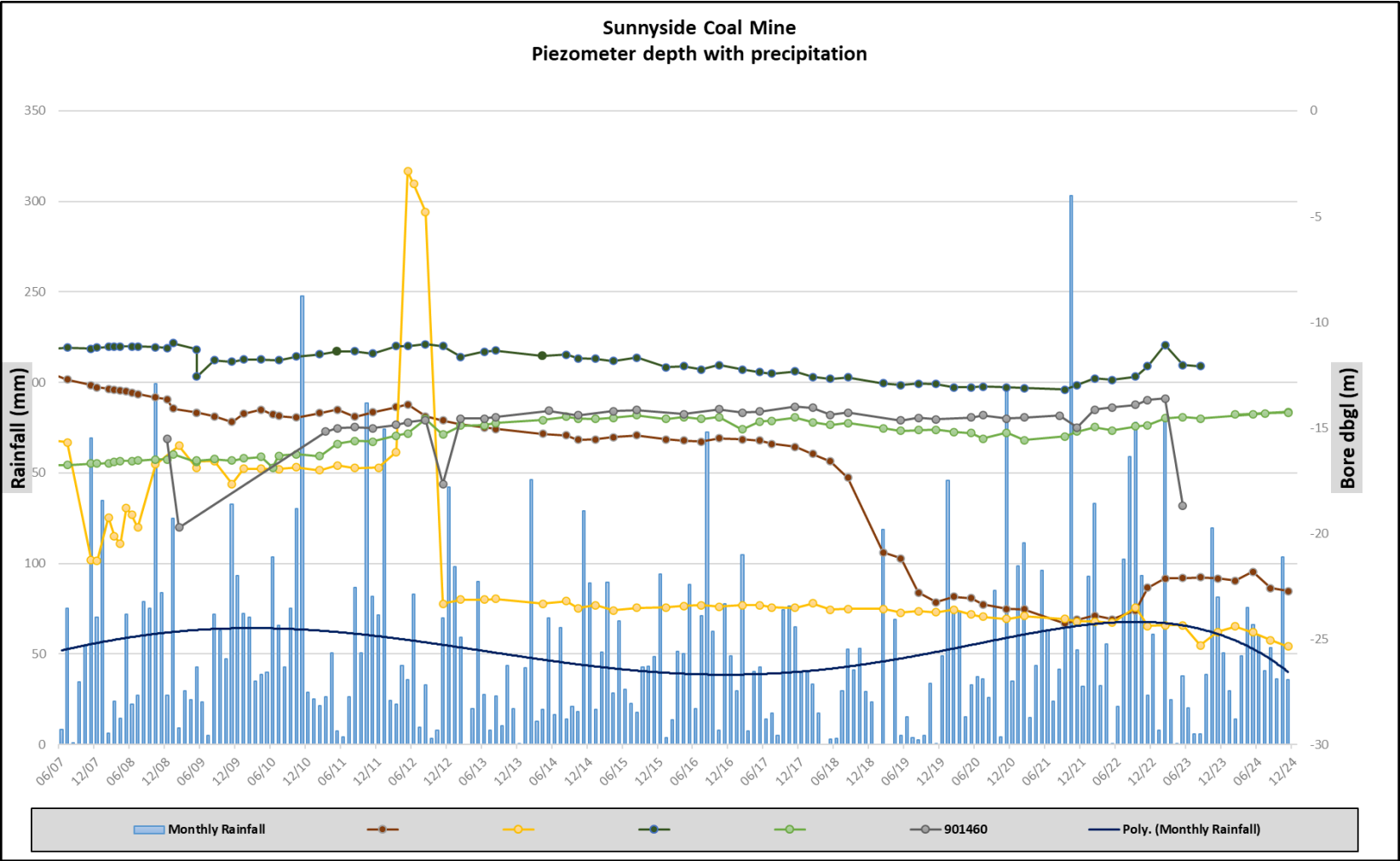


Figure 8 - Monitoring piezometer water depth

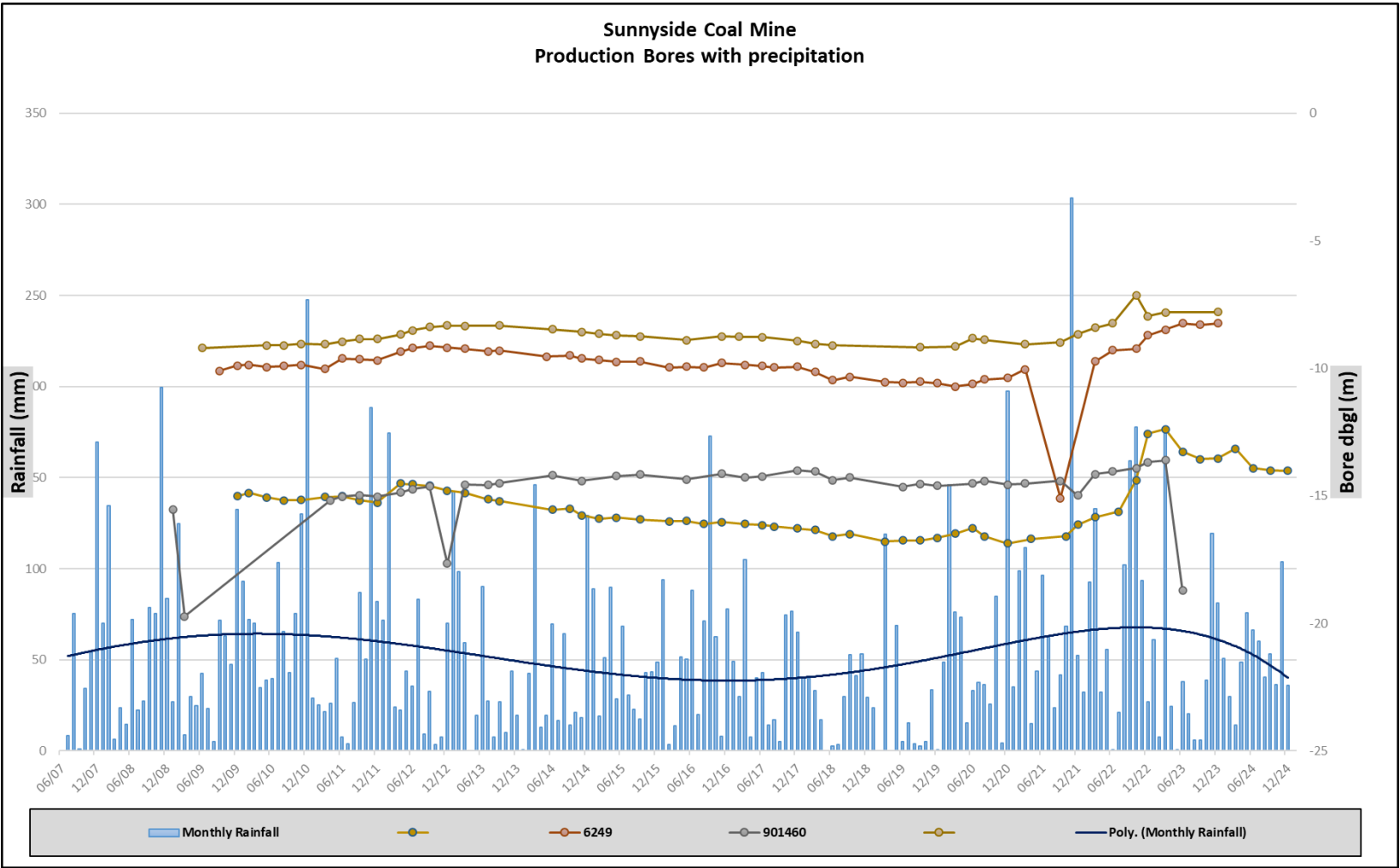


Figure 9 - Production bore water depth

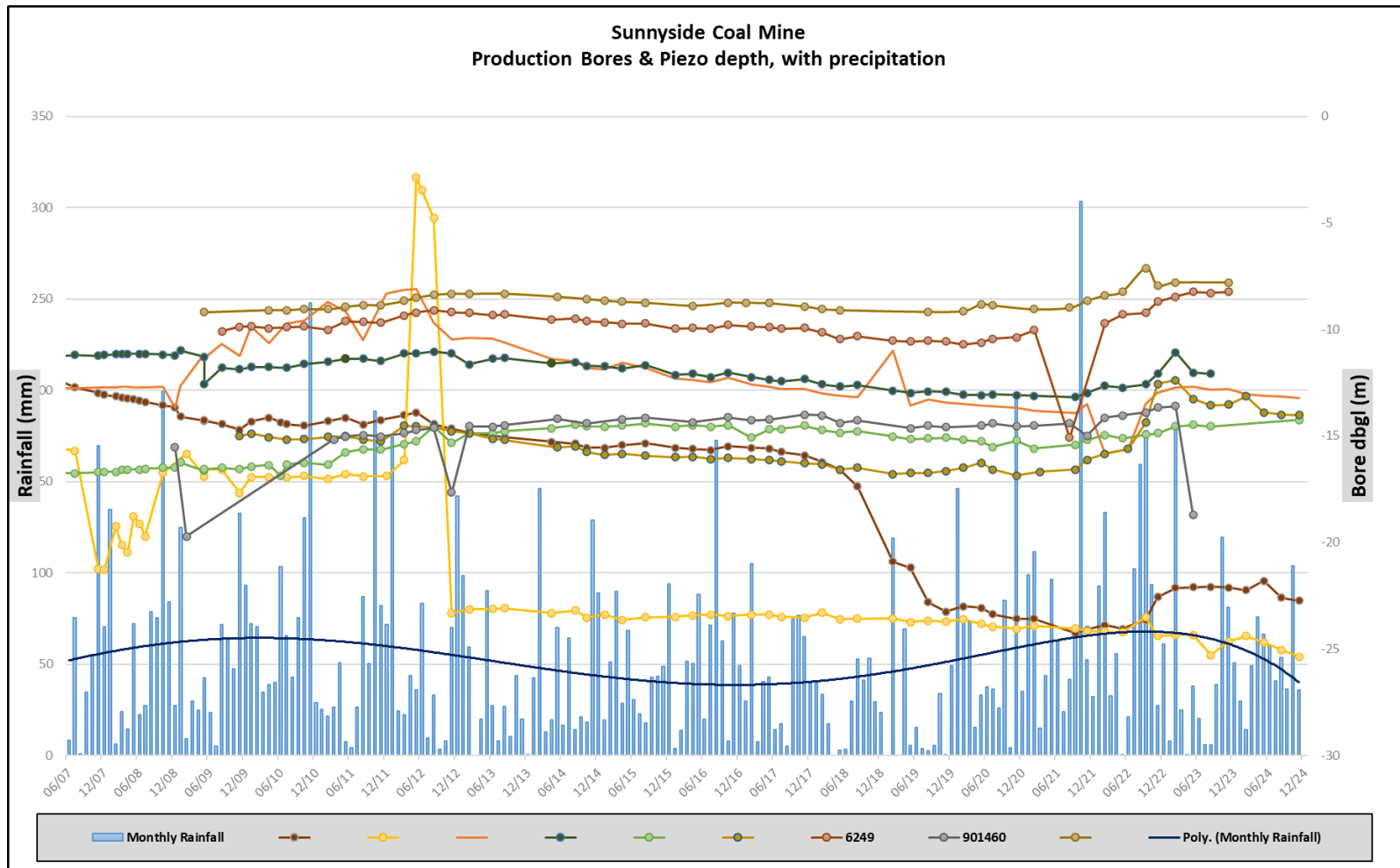


Figure 10 - Production bore water depth, piezometer water depth and the monthly rainfalls.

6.2.2 Groundwater quality

Analysis of samples taken during the reporting period has shown that groundwater quality has remained generally in line with historical data at most locations monitored. Groundwater levels reflect reduced rainfall and dryer climatic conditions. Water quality has been compared to the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000) (ANZECC) guidelines for stock watering (cattle). Groundwater has remained consistent across the monitoring region except for sodium and associated conductivity which varies depending on local geology and groundwater source. Sodium levels fluctuate from 132mg/l (Piezometer P8) to 739mg/l (Piezometer P7).

6.2.3 Groundwater Management

There is no groundwater extraction, and the void has been backfilled and is free draining. Groundwater from surrounding bores, as well as the mine piezometers will continue to be monitored to assess any changes in groundwater quality or level.

6.2.4 Key Environmental Performance/Management Issues

No groundwater performance issues to note during the reporting period. Ongoing monitoring to monitor for any changes.

6.2.5 Proposed Improvements to Environmental Management

No proposed improvements. Ongoing monitoring to monitor for any changes.

7 REHABILITATION

7.1 Rehabilitation Performance during the Reporting Period

7.1.1 Status of Mining and Rehabilitation

The status of mining and rehabilitation at the completion of the reporting period is presented in [Figure 11](#).

Outstanding rehabilitation works include:

- Two remaining exploration drill holes require sealing
- Aftercare and maintenance of rehabilitated areas and infill planting where required.

Table 7.1.1 Rehabilitation Status

Mine Area Type ¹	Previous Reporting Period	This Reporting Period (Actual)	Next Reporting Period (Forecast)
	2023	2024	2025
A. Total Mine Footprint	107.82	107.82	107.82
B. Total Active Disturbance	1.08	1.95	0
C. Land Being Prepared for Rehabilitation	0	0	0
D. Land Under Active Rehabilitation	97.02	97.02	97.02
E. Completed Rehabilitation	0	0	0

Footprint exclude 17.6ha conservation area (Koala Corridors)

**Two dams to be filled/rehabilitated after ecosystem sustainability has been achieved

7.1.2 Post Rehabilitation Land Uses

The overall closure goal for the Sunnyside Coal Mine is to establish a stable and safe landform that is commensurate with the surrounding topography, and which maximises the return to an appropriate agricultural land use comparable to the pre-mining land use, but is considerate of the fact that the landform is a backfilled mining area.

The post-mining landform will include approximately 17.6 hectares (ha) of land rehabilitated with woodland species on dump and highwall slopes to enhance biodiversity values of the area, with additional, ± 17.2 ha of trees planted on areas undisturbed by mining activities along the eastern, northern and western boundaries of the property to enhance the wildlife corridors (Conservation).

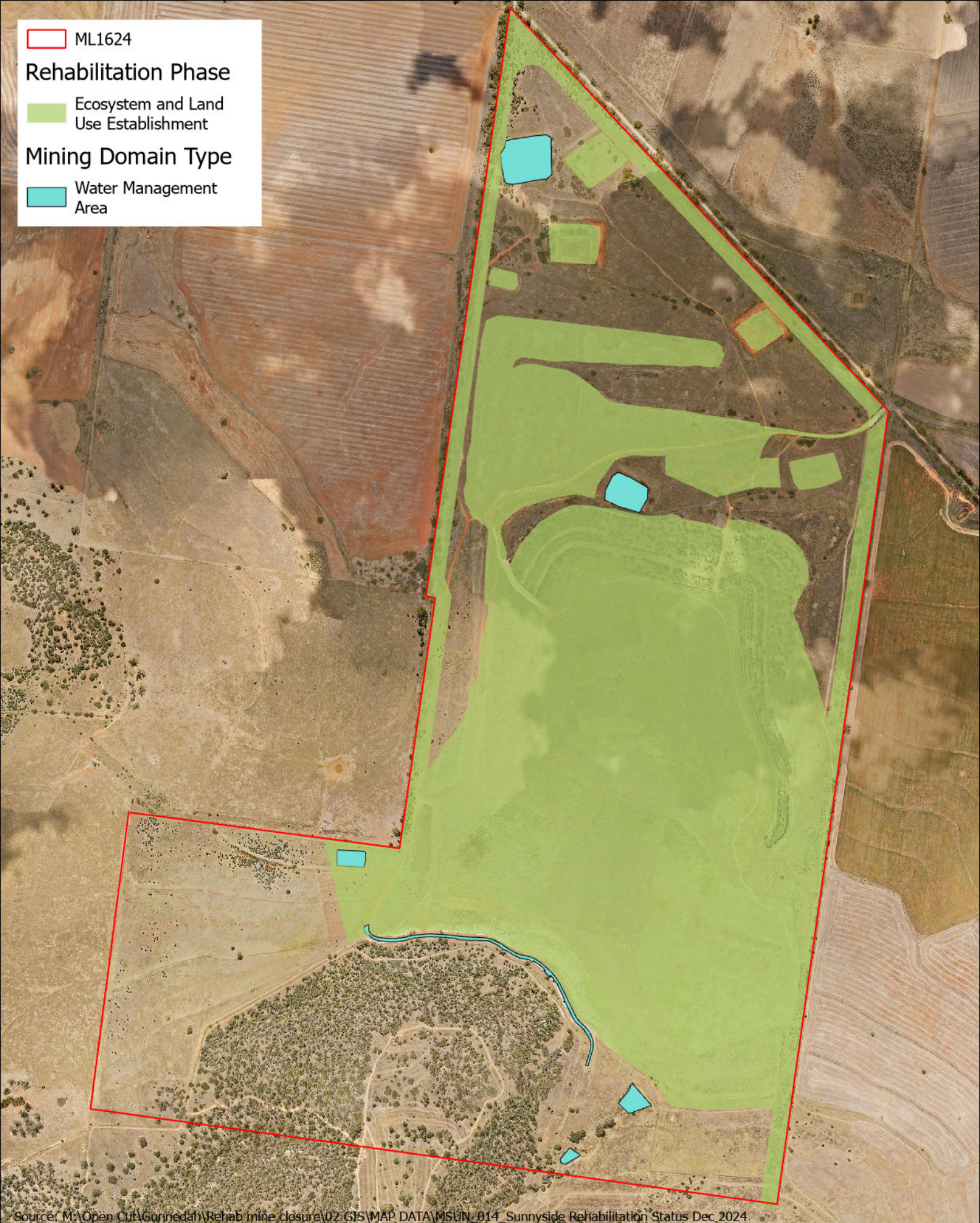
ML1624

Rehabilitation Phase

Ecosystem and Land
Use Establishment

Mining Domain Type

Water Management
Area



Source: M:\Open Out\Gunnedah\Rehab mine closure\02 GIS\MAP DATA\MSUN_014_Sunnyside Rehabilitation Status Dec 2024



Datum MGA2020 Zone 56 Author O.Hulbert

Image March-24 Date March-25 Size/Scale 1:10,000

SUNNYSIDE
Rehabilitation Status
Dec 2024

0 112.5 225 Meters



MSUN_014_Sunnyside_Rehabilitation_Status_Dec_2024

Rehabilitation to final landform and seeding was completed in 2020. Rehabilitation undertaken during the 2023 reporting period included aftercare and maintenance of rehabilitated areas and infill planting on void slopes and woodland area west of the void joining western conservation corridor and existing remnant woodland on Sunnyside Hill. Planting consisted of White box, Kurrajong, Narrow leafed iron bark, Blakely Red Gum, Red Ash, Tumble Down Gum, Large Mock-Olive and Native Olive.

7.1.3 Rehabilitation Monitoring

Monitoring consists of;

- Monthly site inspection by site environmental officer for weeds, feral animals, visual condition of planted tube stock and for signs of erosion.
- Annual detailed ecological assessment of rehabilitated areas and analogue sites by consultant ecologists.

7.1.4 Weeds Management

Weed management is discussed in section 5.2.4.

7.1.5 Renovation or Removal of Buildings

All fixed buildings, concrete pads and bitumen road base were removed. Concrete and bitumen were taken to Gunnedah Shire Council tip. No infrastructure remaining onsite.

7.1.6 Other Rehabilitation Undertaken

No further rehabilitation was undertaken.

7.1.7 Departmental Sign-off of Rehabilitated Areas

Departmental sign-off has not been requested for any rehabilitated areas.

7.1.8 Variations in Activities against RMP

Highwall drain works were completed in 2023.

7.1.9 Trials, Research Projects and Initiatives

No new trials undertaken during the reporting period.

7.1.10 Key Issues to Achieving Successful Rehabilitation

Three key issues to achieving successful rehabilitation are: -

- Establishment of vegetation species to meet Plant Community Types (PCT).
- Management of weeds and feral animals
- Ongoing monitoring and maintenance of drainage lines and drop structures

7.2 Actions for Next Reporting Period

- Infill planting of tree tube stock where required
- Ongoing Weed management and pest control

- Rehabilitation/sealing of two remaining exploration drill holes
- Ongoing pasture grass control in woodland areas

8 COMMUNITY

SCM maintains a designated complaints line and, in the event of a complaint, details pertaining to the complainant, complaint and action taken are recorded.

No complaints were received during the reporting period.

Last five years of complaints are listed in [Table 8](#). Due to the low number of complaints graphing the data is not practical.

Table 8 Community Complaints

Community complaints			
Year	Number of complaints	Aspect	Comment
2024	None		
2023	None		
2022	None		
2021	None		
2020	None		
2019	None		
2018	1	Water	Metallic taste in rainwater tank
2017	None		
2016	1	Air quality	Odor and fumes from mine

Any complaints that are made are reported to the Community Consultative Committee and documented in the AR and the annual EPA Return. A complaints register is also maintained on Whitehaven's website.

Community contributions are managed in accordance with the Whitehaven Coal Donations and Sponsorship Policy. Whitehaven Coal donated \$245,490.80 to local Gunnedah groups and over \$339,094.89 to support local groups in Narrabri during the reporting period. Groups and activities which received contributions included, but were not limited to the following;

Gunnedah LGA:

Yawiriawiri Murri Ganuur descendants
 Rotary Club Gunnedah west
 Carroll community bus incorporated
 Swimming Gunnedah incorporated
 Extent
 Combined Catholic schools p&f
 Winganga Li Early Learning and Care Sevices
 CrossFit Gunnedah
 Gunnedah High School
 Gunnedah Filipino Australia Community
 Gunnedah Junior Rugby Club Incorporated
 Gomeroi Roos
 Australian Whipcrackers & Plaiters Association
 Multicultural Women's Association Inc Charity no.
 Gunnedah and District Bulldogs AFL
 Naidoc Week Committee Incorporated
 The Central Noth Rugby Union
 Gunnedah Bulldogs
 Gunnedah Shire Council
 Gunnedah and District Chamber of Commerce
 Women in Mining
 Gomeroi Allstars
 Gunnedah Pistol Club
 Lions Club of Gunnedah
 Gunnedah Junior Rugby Club Incorporated
 Eric & Carol Hannan
 Boggabri gunnedah Gun club
 Gunnedah Ministers Fraternal
 Dorothea Mackellar Poetry Awards
 Lake Keepit Fishing Club
 The Red Chief - Local Aboriginal Local Council
 Gunnedah Shire Council
 Gunnedah Shire Council
 Gunnedah Swimming
 cougar warriors
 Gunnedah Shire Council
 Plains of Plenty
 Gunnedah Meals on Wheels
 Curlewis PS P&C
 Movember Foundation
 Gunnedah and District Chamber of Commerce

Gunnedah South Public School P&C Association
 Gunnedah Can Assist
 Gunnedah Shire Council
 Gunnedah High School
 Gunnedah High School
 Gunnedah & District Chamber of Comm
 Pccy Gunnedah

Narrabri LGA:

North Branding
 Narrabri industrial network inc
 education public schools
 North western courier
 Boggabri Golf Club
 Forest Coaches
 Narrabri Arts Eisteddfod Inc
 Eulah Creek Recreation Reserve Trust
 Wee waa & District Historical Society Inc
 Presbyterian Social Service
 Narrabri district junior rugby league club
 rotary club narrabri
 Narrabri Shire Community Radio Inc
 The Rotary Club Of Narrabri Inc.
 narrabri and district chamber of commerce
 Narrabri High School
 Narrabri & District Community Aid Service Incorporated
 Narrabri Dolphins Water Polo Club Incorporated
 Wee Waa Community Band Inc.
 Narrabri Dolphins Water Polo Club Incorporated
 Wee Waa Show Society Inc.
 Narrabri industrial network inc
 Narrabri Oztag
 Narrabri Rugby League Football Club
 Namoi Women's Shed Incorporated
 Narrabri industrial network inc
 Richard Barry
 Narrabri RSL sub-Branch
 Maules Creek Campdraft and Junior Rodeo 2023
 Yarrie Lake Flore & Fuana Trust
 St Xaviers Narrabri
 Boggabri Rugby League Football Club
 Nosh Narrabri Committee
 Nosh Narrabri Committee
 Boggabri Public School
 WHC - Clontarf

9 INDEPENDENT AUDIT

The most recent Independent Environmental Audit (IEA) occurred in 2022, with submission of the final report and response to Audit Recommendations submitted to the Department in October 2022. Non-compliances identified by the IEA were risk ranked by the auditor in accordance with [Table 1c](#). SCM subsequently developed an Audit Action Plan for the one administrative non-compliance. The Audit Action Plan is available on the Whitehaven Coal website, there are no outstanding audit actions.

Next Independent Audit is scheduled for 2025.

10 INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD

10.1 Reportable Incidents

None for the reporting period

10.2 Non-compliances

No non-compliances during the reporting period.

10.3 Regulatory Actions

No regulatory actions were issued to Sunnyside in 2024.

11 ACTIONS TO BE COMPLETED IN THE NEXT REPORTING PERIOD

The following measures will be continued, or implemented, in the next reporting period to improve the environmental or community performance of the operation: -

- Remove sedimentation dams no-longer required
- The continuation of environmental monitoring and management, as per the relevant approvals and environmental management plans;
- Review and revision of various Environmental Management Plans; and Continued community liaison and engagement with local stakeholders.