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
MOP start date	06-11-2018
MOP end date	05-11-2025
Annual review start date	01-01-2019
Annual review end date	31-12-2019
I, Jacques du Toit, certify that this audit report is a true and accurate record of the compliance status of Sunnyside Coal Mine for the period January 1st 2019 until December 31th 2019, and that I am authorised to make this statement on behalf of Namoi Mining Pty Ltd. *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.* *b) The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or $22,000, or both).*	
Name of authorised reporting officer	Jacques du Toit
Title of authorised reporting officer	General Manager - Open Cut Operations
Signature of authorised reporting officer	
Date	26/03/2020

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1 STATEMENT OF COMPLIANCE

The compliance status of the Sunnyside Coal Mine as at 31st December 2019 is summarised in Table 1a. Non-compliances that occurred during the reporting period are listed in Table 1b, and non-compliances from previous reporting periods that still require management action.

Table 1a - Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	
PA 06_0308 Consolidated	No
EPL 12957	No
ML 1624	No
WAL 29537	Yes

Table 1b - Non-compliances

Relevant Approval	Schedule (Condition) Number	Condition Description (summary)	Compliance status	Comment	Where Addressed in Annual Review
PA 06_0308	2(2)	Carry out project generally in accordance.	Non-compliant	Refer following conditions.	n/a
ML 1624	3 (a)	Sunnyside Coal Mine operated between the 19th and 22nd of January without an approved MOP.	Non-compliant	Due to delay in closure MOP approval	Section 8.1.9
PA 06_0308 L5.1 EPL 12957	(3)10	Blast overpressure not to exceed 115dB for more than 5% of total number of blasts. Blast overpressure not to exceed 115dB for more than 5% of total number of blasts	Non-compliant	Airblast overpressure levels were exceeded on 7th June 2019.	Section 6.3.2
PA 06_0308	3(18)	Air Quality Impact Assessment Criteria	Non-compliant	Several exceedances of the 24hr 50 µg/m^3 criteria have resulted in an exceedance of the annual average criteria of 30 µg/m^3.	Section 6.1.3

Note: Non-compliances identified within the Independent Environmental Audit undertaken during a previous reporting period are listed in Table 10.

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: • 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: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, 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 eleventh 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 2019 to 31st December 2019 (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 (Figure 1). 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).

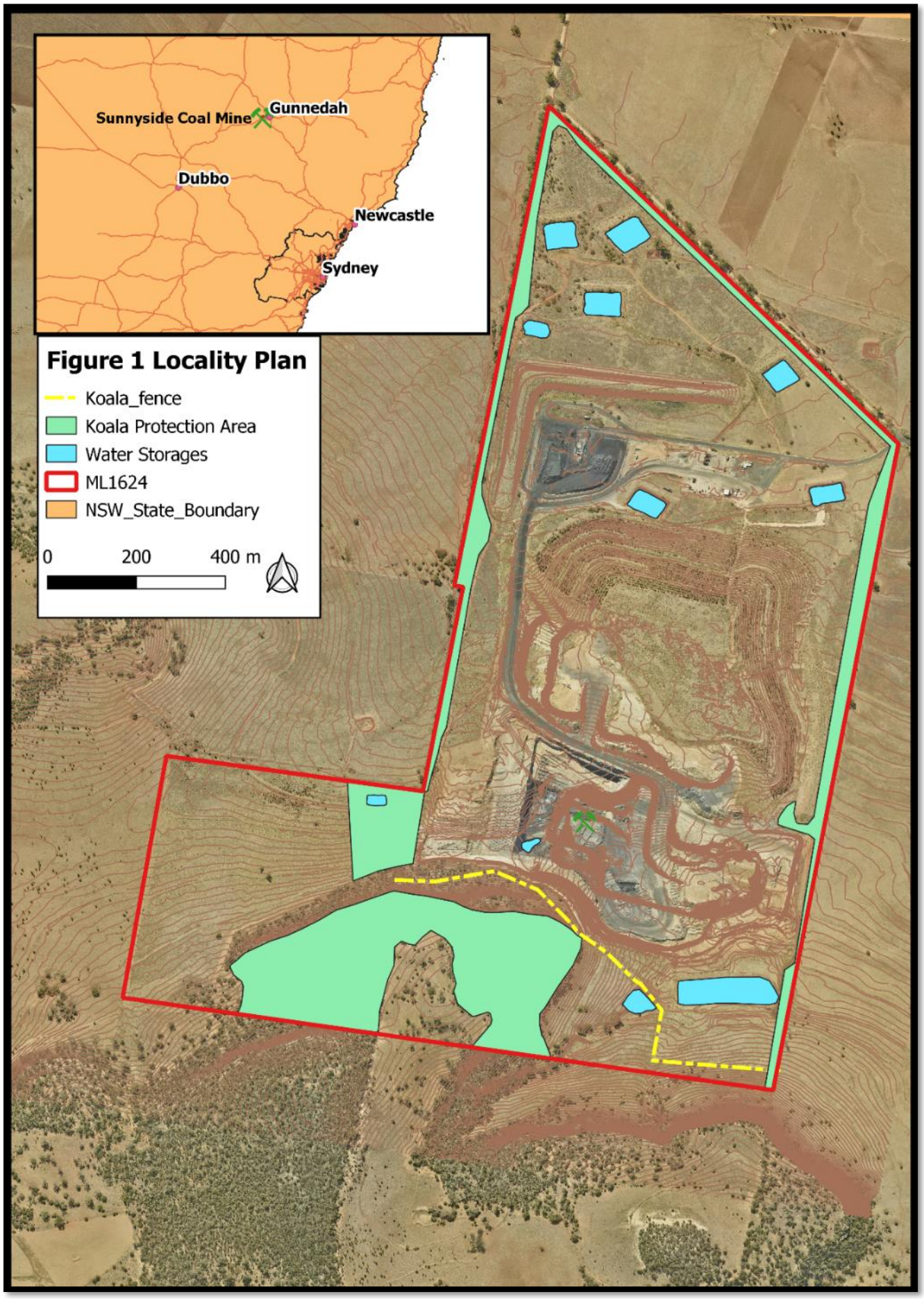
Mining and coal transporting operations at SCM ceased in May 2013, with recommencement of mining activities on 12th September 2017. Mining operations for coal ceased in August 2019, with coal crushing and transporting activities ceasing on the 27th of October 2019. Site activities are limited to rehabilitation.

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 Craig Sullivan, Operations Superintendent and Manager Mining Engineering - retains statutory responsibility for mining activities at the site. Contact: (02) 6741 9390
- Mr Jacques du Toit, Open Cut Operations - oversees Open Cut Operations for the Whitehaven Group. Contact: (02) 6741 9325.
- Mr Andrew Raal, Mine Rehabilitation & Closure Officer – oversees day to day environmental and rehabilitation performance across the site. Contact: (02) 6741 9361

Figure 1 Locality Plan



3 APPROVALS

3.1 Tenements, Licences, and Approvals

Table 2.1 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 2.1 - 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	5th November 2020	PA modified December 2016 to update Annual Review period.
Environment Protection Authority (EPA)	Environment Protection Licence No. 12957	19th September 2017	N/A	Update to reflect recommencement of operations
Resource Regulator (NSW Resources and Geoscience (RR)	ML 1624	5th November 2008	5th November 2029	
Division of Resources and Geoscience	Mining Operations Plan (MOP)	6th November 2018	5th November 2025	Granted during reporting period January 2019
Department of Primary Industry - Water	WAL 29537 (90WA822534) 90BL253767 90BL253768 90BL253769 90BL254686 90BL254687 90BL254688 90BL254689 90BL254690	27th April 2009 9th Feb 2007 9th Feb 2007 9th Feb 2007 26th Mar 2008 26th Mar 2008 26th Mar 2008 26th Mar 2008 26th Mar 2008	17th January 2025 Perpetuity Perpetuity Perpetuity Perpetuity Perpetuity Perpetuity Perpetuity Perpetuity	Mining Test Test Test Monitoring Monitoring Monitoring Monitoring Monitoring

4 OPERATIONS SUMMARY

4.1 Mining Operations

Mining operations during the reporting period included drilling, blasting and handling of waste rock/overburden material, coal mining, onsite crushing and transport of coal to Whitehaven Gunnedah CHPP. Table .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 [1]	2.291,716 m^3	1,584,472 m^3	0
ROM Coal/Ore	1 Mtpa [2]	515,702 t	244,865 t	0
Reject material	n/a	0	0	0
Saleable Product	n/a	364,366t	396,235 t	0

[1] Environmental Assessment

[2] PA 06_0308 Consolidated

4.2 Other Operations

4.2.1 Hours of Operations

Mining operations 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

Management of infrastructure (e.g. buildings, roads, generators and pumps) and other facilities not specified elsewhere within this AR is undertaken on an as-needs basis or in accordance with statutory requirements in order to maintain them in an operationally efficient, safe, neat and tidy condition, and one which does not result in the direct or indirect generation of unacceptable environmental impacts.

No additional infrastructure other than alterations to unsealed roads for mining purposes.

4.2.3 Exploration Drilling

There was no exploration drilling undertaken during the period.

4.3 Next Reporting Period

Coal mining has now ceased at the SCM, with the site now progressing rehabilitation to final landform. Only rehabilitation activities relating to final landform and drainage will be undertaken.

5 ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

Letter received form the Department of Planning and Environment NSW on the 30th April 2019 requested an amended submission of the Annual Review, with updates to Section 1, Statement of Compliance, and Section 11, Incidents and Non-compliances, along with updated formatting throughout. The amended Annual Review was submitted, and letter received form the Department of Planning and Environment NSW on the 21 May 2019 stated acceptance of amended review, with no actions required.

6 ENVIRONMENTAL PERFORMANCE

The following sub-sections document the implementation and effectiveness of the various control strategies adopted at the SCM, together with monitoring data for the reporting period. Existing monitoring sites are shown in **Error! Reference source not found.**. Life of mine monitoring data is included as Appendices in this AR, where relevant, to allow for discussion on longer-term trends.

6.1 Air Quality

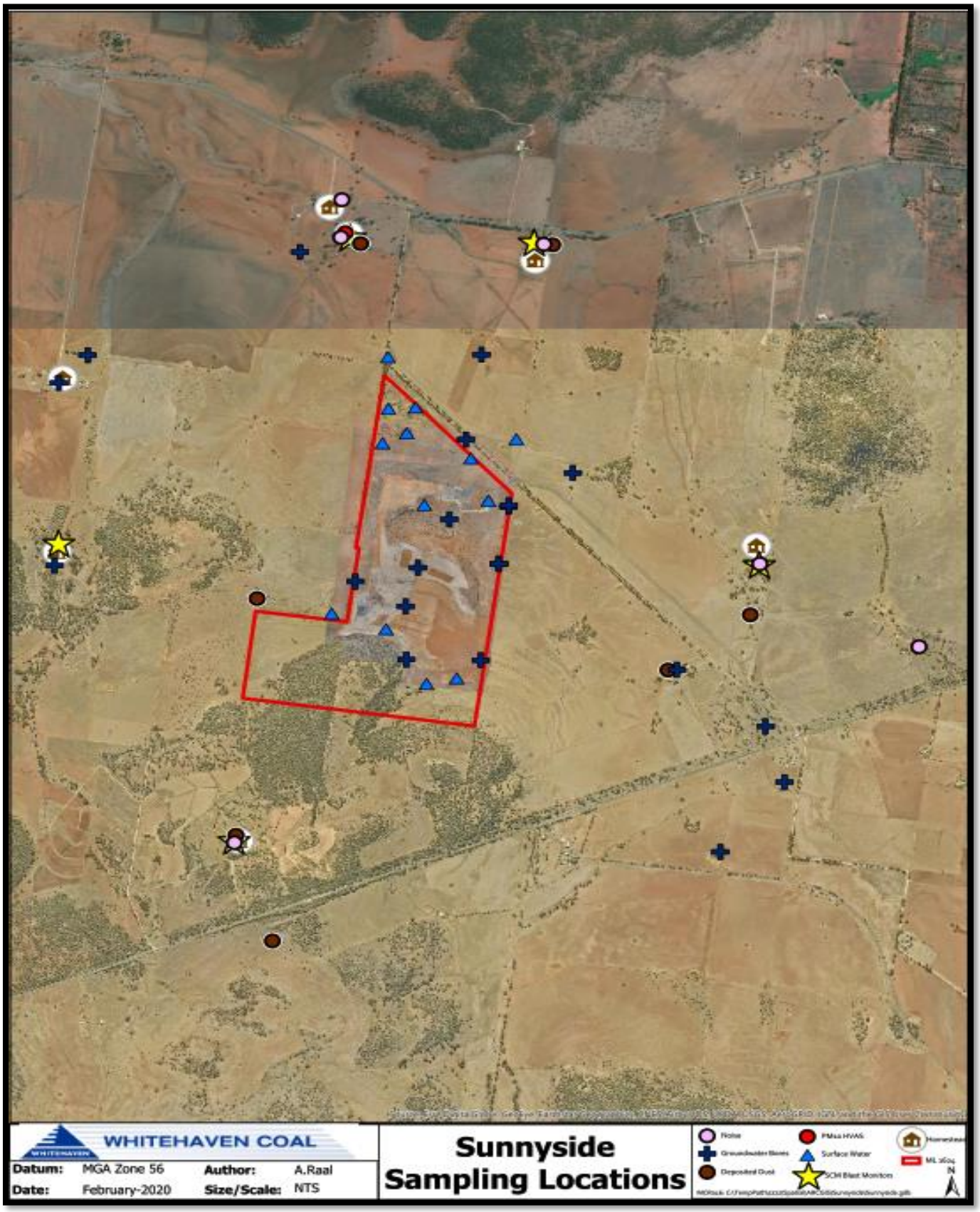
6.1.1 Criteria

The air quality criteria applicable to the SCM are specified in PA 06_0308 (consolidated) Schedule 3, Tables 7, 8 & 9, which are summarised below.

- Acceptable mean annual increase in deposited dust – 2 g/m2/month.
- Mean annual dust deposition (all sources) – 4 g/m2/month.
- Mean annual Total Suspended Particulate (TSP) matter (all sources) concentration – 90 μg/m3.
- Mean annual PM10 particulate level – 30 μg/m3.
- 24 hour average PM10 particulate level – 50 μg/m3.

Monitoring of deposited dust is undertaken on a continuous monthly basis whilst PM_{10} levels are monitored every 6 days.

Figure 6 Monitoring Sites



6.1.2 Environmental Management Measures

In order to satisfy the criteria identified above, SCM implemented the following controls during the reporting period

- Training and discussion of dust during adverse weather conditions with equipment operators, including requirement to report any dust
- Reduced unsealed road haulage or cessation of operations during high rainfall events to maintain road surfaces in good condition
- Use of extra water cart as required during strong winds, and if any excessive dust is noticed
- Blasting restrictions during unfavourable metrological conditions
- Conducting inspections that align with our T.A.R.P process for adverse weather conditions and monitoring the whole operation, which includes, cessation of operations during extreme weather where dust can't be controlled.

6.1.3 Dust Monitoring

Deposited Dust

Deposited dust monitoring data for the reporting period is given in Table 6.1.3a. **Error! Reference source not found.** gives the locations of the various deposited dust gauges maintained during the reporting period.

Table 6.1.3a Deposited Dust Monitoring Data Summary

Site (Figure 2)	EPL ID no.	Property Name	Approval Criteria Annual mean (g/m^2/month)	Annual Mean Total Insoluble Solids (g/m^2/month)
SD1	1	Ferndale	4	2.7
SD3	2	Plainview	4	3.2
SD4		Lilydale	4	1.9
SD5	4	Ivanhoe	4	3.1
SD6	5	Illili	4	2.2

SD7	6	Innisvale	4	2.0
SD8		Woodlawn	4	1.8

Table 6.1.3b – PM10 Monitoring Summary

Year	Annual Guideline 30µg/m3	24 Max limit µg/m³	Annual Mean µg/m³	Number Exceedances 24h limit µg/m³	Max 24h µg/m³
2009	30	50	21.05	2	109.0
2010	30	50	9.27	0	33.0
2011	30	50	9.72	0	25.4
2012	30	50	13.30	0	49.3
2013	30	50	13.61	0	45.2
2014	30	50	12.75	0	30.3
2015	30	50	11.46	0	29.7

Annual mean limit for deposited dust was not exceeded at any location during the reporting period.

HVAS/PM10 Dust

SCM has one High Volume Air Sampler (HVAS - PM_{10}) located at the property Illili (EPL ID 7), to the north-west of the mine site (**Error! Reference source not found.**).

Summary of PM_{10} results since 2009 are given in Table 6.1.3b. The annual mean value for 2019 exceeded the criteria of 30 µg/m³, and results are also above the EA annual prediction of 22.1 µg/m^3. There were twelve exceedances of the 24h limit of 50 µg/m³. Cause of the elevated dust readings was determined to be a combination of regional dust storms and ash and smoke from bushfires. Exceedances were reported to NSW Department of Planning and Environment. In order to provide a more accurate report of the HVAS results both regionally and as they directly represent Sunnyside operations, and following advice from the Department of Planning, Industry and Environment, this AR will provide two datasets, one including all results and one excluding extraordinary event days for the purposes of compliance. A number of dates were identified by the Namoi North West Slopes Regional reports, prepared by and published by the Department, as being extraordinary event days, and these dates have been excluded from the data set wherever a HVAS run occurred on that date. These dates include the 16th and 19th January, the 13th, 14th, and 21st February, the 6th, 12th, and 31st March, the 20th and 27th July, and the 8th and 19th August 2019.

Where exceedances have been preliminarily accepted by the Department as being impacted by an extraordinary event, but are awaiting confirmation in the regional reports, these have also been excluded from annual averaging. These dates include the 17th, 23rd, and 29th October, the 22nd and 28th November, and the 10th, 16th, and 22nd of December 2019. This data is represented below in Figures 6.1.3c & d.

Figure 6.1.3c Illili PM10 Annual Rolling Average (full data set)

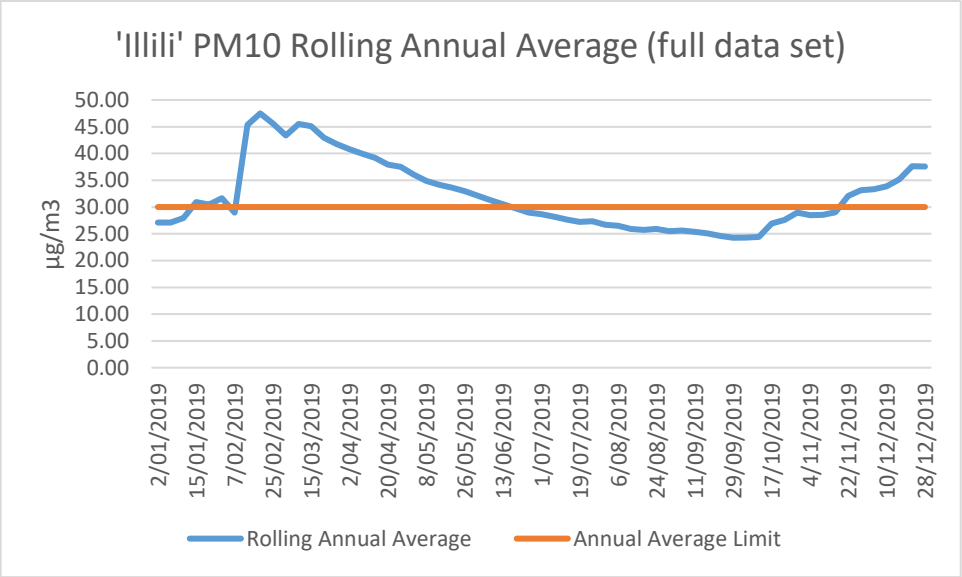
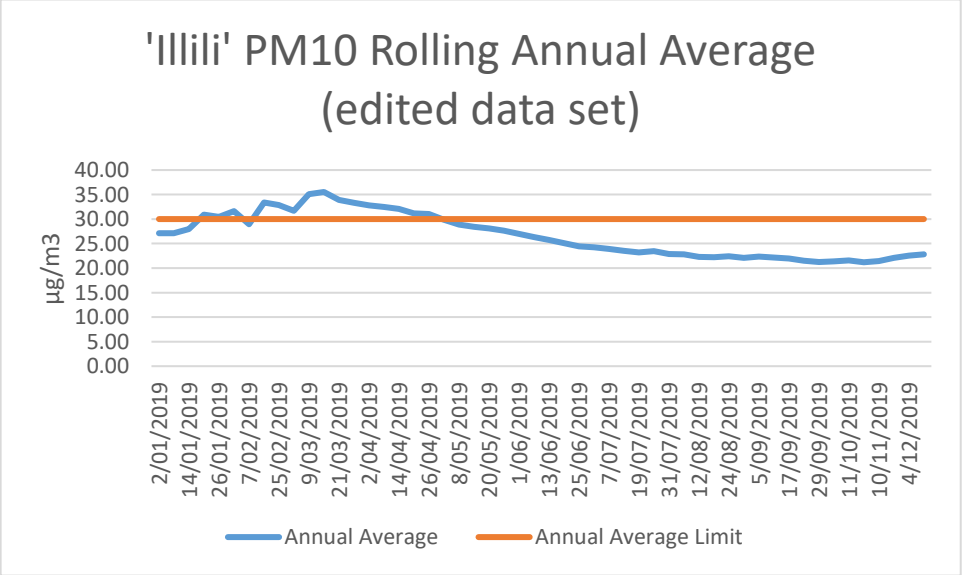


Figure 6.1.3d Illili PM10 Annual Rolling Average (edited data set)



As illustrated in Figure 3, with the removal of HVAS data recorded during extraordinary events the rolling annual average for the reporting period is 22.78 µg/m3, below the annual average criteria of 30 µg/m3, although still slightly above the EA annual prediction of 22.1 µg/m^3.

6.1.4 Key Environmental Performance/Management Issues

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

6.1.5 Proposed Improvements to Environmental Management

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

6.2 Biodiversity

6.2.1 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.

6.2.2 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.

Fauna quadrat establishment was undertaken in November 2010 by Dr Leong Lim (Countrywide Ecological Services), where two grassland monitoring plots were established. Since establishment, roof tiles have been scattered throughout the quadrats to enhance the ground habitat structure and provide refuges for the ground fauna. The establishment of two woodland plots to the south of the active mining area occurred in February 2011, during a monitoring campaign. These plots are placed in open woodland, and open woodland with grassy understory communities.

6.2.3 Ecological Monitoring

A detailed annual ecological assessment of rehabilitated areas and analogue sites was undertaken by Aspect Ecology Pty Ltd in December 2019.

Monitoring comprised:

- Two analogue grassy white box woodland sites;
- Six rehabilitation structural sites:
    - Three repeat monitoring plots previously established within 2010 rehabilitation;
    - Three newly established transects—one within each of the rehabilitation years 2011, 2012 and 2013; and
- Categorical point assessments at notable locations within the rehabilitation, aimed at highlighting priority areas and further improving rehabilitation data spatial coverage.

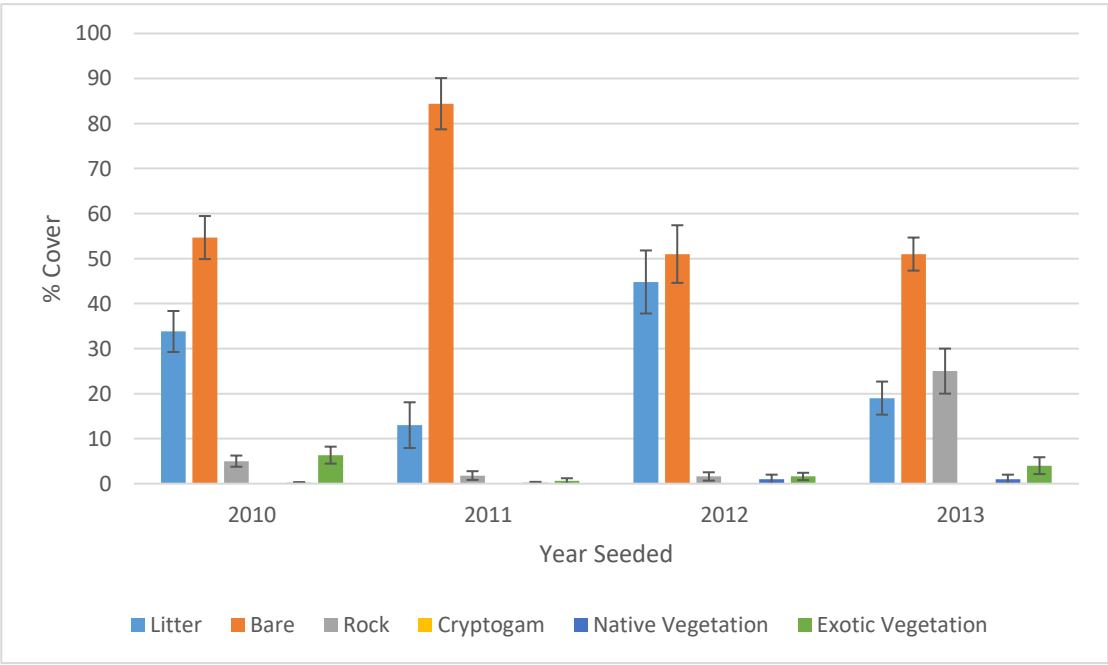
In addition to undertaking the BioBanking Assessment Methodology (BBAM—DECC 2008; OEH 2014), new protocols were introduced to allow assessments of tree densities including seedlings.

Woodland Domain

Groundcover

Bare ground predominated in all rehabilitation years, although levels of litter were similar to the amount of bare ground in 2012 rehabilitation, and litter was the second most abundant cover type overall (**6.2.3a**). Rehabilitation year 2013 had a higher proportion of rock than the other years. Vegetation cover was low at all sites, reflecting drought conditions, and exotic vegetation cover slightly exceeded native cover in all cases according to quadrat data (Error! Reference source not found.). The dominant grass was often the exotic Liverseed Grass *Urochloa panicoides*, with cover up to cover 15% within plots.

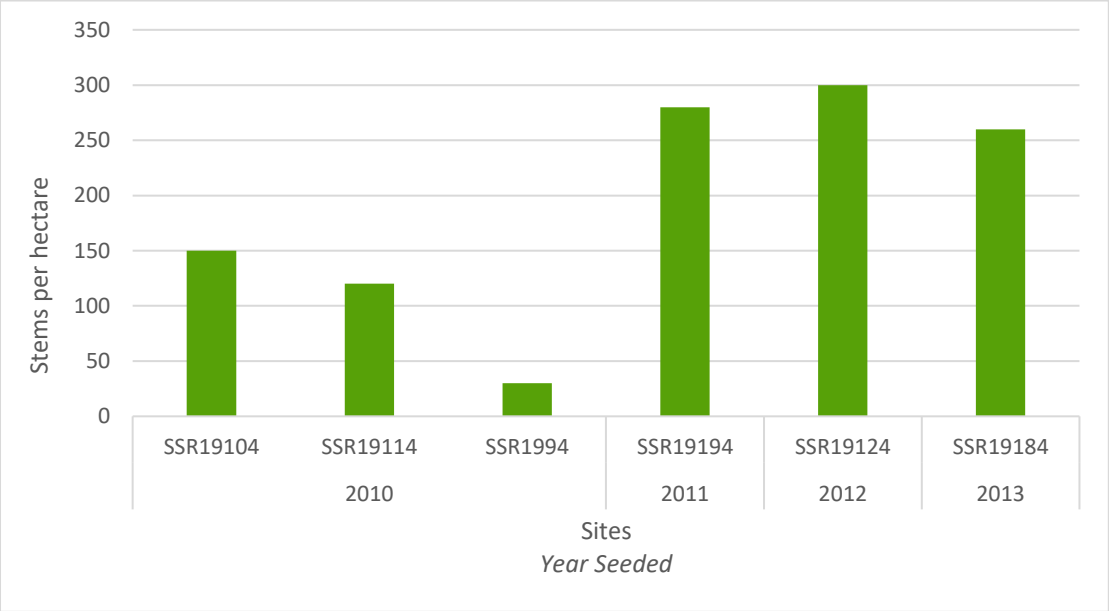
Figure 6.2.3a Average Percentage Cover of Groundcover Components within each Rehabilitation Year at Sunnyside Coal Mine. Bars show standard error of the mean.



Tree density

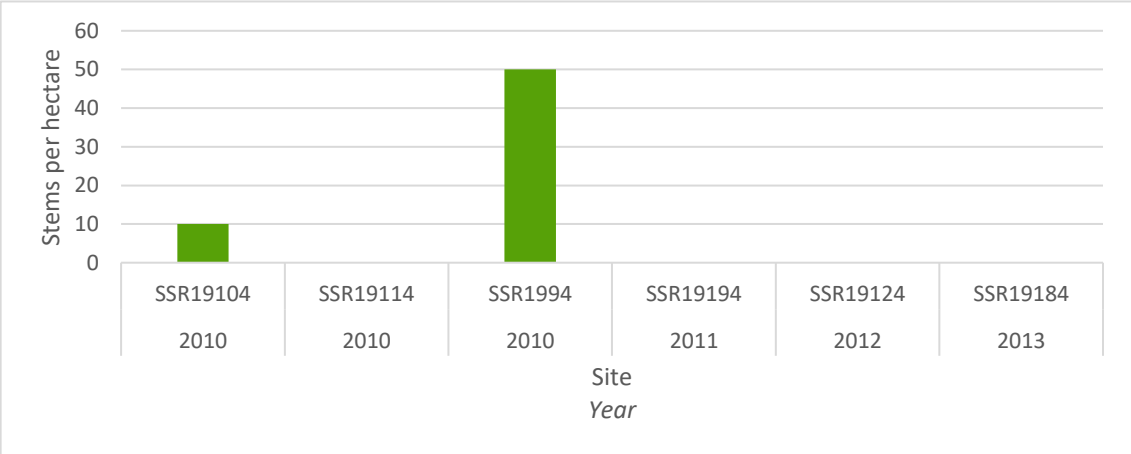
Tree density within sites varied between 30–300 stems per hectare. Rehabilitation year 2010 had significantly lower tree density than the other three years, averaging 100 (±36) stems/ha, while the other years were ≥ 260 stems/ha (**6.2.3b**).

Figure 6.2.3b Density of stems (≥1.3 m in height) within rehabilitation sites at Sunnyside Coal Mine, grouped by year seeded



Seedlings were absent within structural sites in all rehabilitation years except for 2010, where they averaged 20 (±15.3) stems/ha (**6.2.3c**).

Figure 6.2.3c Density of tree seedlings within rehabilitation sites at Sunnyside Coal Mine, grouped by year seeded



Point-based categorical assessments of tree density show that they are generally abundant in planted slopes in rehabilitation years 2011–2013, but absent from the flatter terraces used for erosion control and access, as well as an area adjacent to two dams in the downslope portion of the 2011 and 2013 rehabilitation.

Fauna

Noted habitat features included occasional small rocks and the developing tree canopy. All sites showed traces (scats) of both native and feral animals. Feral Pig diggings were observed at two sites.

Recommendations

The monitoring report recommends that infill plantings be carried out throughout the Woodland Domain, including:

- within the 2010 rehabilitation to improve woody species density; and
- within other years to achieve a more randomised tree patterning, and areas where trees are absent (while retaining vehicular access routes).

The report also recommends that steps are taken to improve native groundcover diversity, once establishment conditions are more suitable, using species recorded in the analogue sites.

6.2.4 Weeds

Site Weed inspections are undertaken quarterly by consultants (Hunter Land Management), and annually during the detailed ecological monitoring. Main weeds of concern are Prickly Pear and African Box Thorn, general broadleaf and saffron thistle. A site wide program of weed spraying was undertaken in August 2019.

6.2.5 Feral Animal Control

Two camera traps were established during the last reporting period to monitor wildlife numbers and movement at Sunnyside. Results indicated a scarcity of Wild dogs, cats, pig, rabbit, hare and deer, with a low population of foxes, and high abundance or kangaroos.

Fox baiting using 1080 was undertaken in November 2019 over a period of 4 weeks, baits were checked weekly and replaced. In total 14 baits were taken.

6.2.6 Koala Management

During the reporting period 9 koalas were spotted onsite by mine personal. The University of Sydney also undertook a Koala survey with the following results;

- Diurnal searches and spotlighting were used for detecting koalas on Sunnyside
- 18 adult koalas were detected in total at Sunnyside, 9 via diurnal searches and 9 via spotlighting.

- Survey 1: 10 adult koalas observed, 5 during diurnal searches (4 on four transects and 1 opportunistic sighting) and 5 during spotlighting (3 on four transects and 2 opportunistic sighting).
- Survey 2: 8 adult koalas observed, 4 during diurnal searches (1 on one transect and 3 opportunistic sightings) and 4 during spotlighting (3 on two transects and 1 opportunistic sighting).
- Three koalas presented obvious clinical signs of Chlamydia (i.e. dirty bottom, conjunctivitis)

Additional plantings of 560 tree tube stock were planted in June 2019 along the koala wildlife corridors. Tree species were majority koala palatable eucalyptus.

6.2.7 Performance/Management Issues

Planting methodology of the tubes stock was amended to include pre-ripping, mounding around the plant to hold more water. Planting was in a more staggered pattern. Fortnightly watering was undertaken. A survival and plant health survey was undertaken on the 20th of December 2019 which showed good growth and a 92% survival rate of tubes planted on the eastern corridor.

6.2.8 Proposed Improvements to Environmental Management

Improvements will include;

- Continuation of infill tube stock planting,
- Applying mulch at the base of planted tube stock.

6.3 Blasting

6.3.1 Criteria

Blasting criteria for the SCM are noted in PA 06_0308, and Condition L5 of EPL 12957, and included below:

The overpressure level from blasting operations must not:

- exceed 115dB (Lin Peak) for more than 5% of the total number of blasts over each reporting period; and
- exceed 120dB (Lin Peak) at any time, at any residence on privately-owned land.

Ground vibration peak particle velocity from the blasting operations must not:

- exceed 5mm/s for more than 5% of the total number of blasts during each reporting period; and

- exceed 10mm/s at any time, at any residence on privately-owned land.

6.3.2 Key Environmental Performance/Management Issues

There were in total 5 blasts in the pit during the reporting period. One blast undertaken during the reporting period marginally exceeded the <115dB blast overpressure criteria for 5% of the total number of blasts at the Plainview monitor.

Potentially the face orientation of the blast, using the Elliptical air blast methodology, contributed to the received overpressure at the Plainview monitor. It is noted that no other blast monitors recorded elevated results, including monitoring locations closer to the blast.

The exceedances were reported to Department of Planning and Environment, who issued an official warning letter for the exceedances.

Table 6.3.2 Blast Monitoring Results

BLASTS 2019					
Blast ID	**Date**	**Station**	**Vibration (5 mm/s)**	**Overpressure (115dB)**	**Time**
19_001	2-Jan-19	Ivanhoe	1.85	92.2	13:00:15
19_001	2-Jan-19	Plainview	0.44	100.2	13:00:15
19_001	2-Jan-19	Innisvale	1.55	104.9	13:00:15
19_001	2-Jan-19	Illili	0.74	89.1	13:00:15
19_001	2-Jan-19	Ferndale	0.31	90	13:00:15
19_002	18-Jan-18	Ivanhoe	0.88	102	15:08:23
19_002	18-Jan-18	Plainview	0.55	111.6	15:08:23
19_002	18-Jan-18	Innisvale	0.91	114.2	15:08:23
19_002	18-Jan-18	Illili	0.64	103	15:08:23
19_002	18-Jan-18	Ferndale	0.54	106	15:08:23
19_003	7-Jun-19	Ivanhoe	1.84	111	13:16:38
19_003	7-Jun-19	Plainview	0.86	116	13:16:38
19_003	7-Jun-19	Innisvale	1.16	112.9	13:16:38
19_003	7-Jun-19	Illili	0.90	107.7	13:16:38
19_003	7-Jun-19	Ferndale	1.07	109.5	13:16:38
19_004	27-Jun-19	Ivanhoe	0.21	108.4	12:12:32
19_004	27-Jun-19	Plainview	0.11	106.8	12:12:32
19_004	27-Jun-19	Innisvale	0.19	101.9	12:12:32
19_004	27-Jun-19	Illili	0.07	102.6	12:12:32
19_004	27-Jun-19	Ferndale	0.08	107.4	12:12:32
19_005	5-Jul-19	Ivanhoe	0.31	104.8	15:06:00
19_005	5-Jul-19	Plainview	0.17	101.2	15:06:00

BLASTS 2019					
Blast ID	**Date**	**Station**	**Vibration (5 mm/s)**	**Overpressure (115dB)**	**Time**
19_005	5-Jul-19	Innisvale	0.21	106.2	15:06:00
19_005	5-Jul-19	Illili	0.06	102.9	15:06:00
19_005	5-Jul-19	Ferndale	0.08	104.8	15:06:00

6.3.3 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.

6.4 Operational Noise

6.4.1 Criteria

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

Location	***Day***	***Evening***
	$L_{Aeq\ (15\ min)}$	$L_{Aeq\ (15\ min)}$
All privately-owned land	*35*	*35*

6.4.2 Environmental Management Measures

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

- Where operationally feasible, scheduling activities to minimise operation of equipment in exposed locations when winds are blowing towards residences and elevated locations when temperature inversions are present;
- Equipment removal or replacement;
- Changing operational procedures;
- Restricting hours of operations;
- Enclosure of fixed items of plant, e.g. generators;
- Bunding close to noise sources to create obstructions to the propagation path;
- On-going site road maintenance using the mine-based grader; and

- Regular equipment maintenance.

6.4.3 Noise Monitoring Results

Attended monitoring was conducted quarterly by various consultants. Monitoring is repeated for each site over a 3-day period. A summary of the results for each quarter are presented in Table 6.4.3. With the maximum recorded value being listed. During the reporting period there were no recorded exceedances of the monitoring criteria.

Table 6.4.3 - Summary of quarterly noise monitoring results

2019 Noise Monitoring Summary Monitoring repeated over 3 days, only highest reading shown				
Quarter	**Station**	**Period**	**L_{Aeq} 15min**	**Exceedance**
Q1 Feb 2019	Ferndale	Day	35	No
	Ferndale	Evening	I/A	No
	Glendower	Day	30	No
	Glendower	Evening	1/A	No
	Illili	Day	29	No
	Illili	Evening	I/A	No
	Innisvale	Day	28	No
	Innisvale	Evening	I/A	No
	Plainview	Day	I/A	No
	Plainview	Evening	I/A	No
	Woodlawn	Day	I/A	No
	Woodlawn	Evening	I/A	No
Q2 June 2019	Ferndale	Day	35	No
	Ferndale	Evening	I/A	No
	Glendower	Day	I/A	No
	Glendower	Evening	I/A	No
	Illili	Day	35	No
	Illili	Evening	I/A	No
	Innisvale	Day	I/A	No
	Innisvale	Evening	I/A	No
	Plainview	Day	35	No
	Plainview	Evening	I/A	No
	Woodlawn	Day	35	No
	Woodlawn	Evening	I/A	No
Q3 Sept 2019	Ferndale	Day	25	No
	Ferndale	Evening	<30	No
	Glendower	Day	30	No
	Glendower	Evening	I/A	No
	Illili	Day	25	No
	Illili	Evening	<30	No
	Innisvale	Day	30	No
	Innisvale	Evening	I/A	No

2019 Noise Monitoring Summary Monitoring repeated over 3 days, only highest reading shown				
Quarter	**Station**	**Period**	**L_{Aeq} 15min**	**Exceedance**
	Plainview	Day	35	No
	Plainview	Evening	I/A	No
	Woodlawn	Day	I/A	No
	Woodlawn	Evening	I/A	No
Q4 Dec 2019	Ferndale	Day	32	No
	Ferndale	Evening	I/A	No
	Glendower	Day	<30	No
	Glendower	Evening	I/A	No
	Illili	Day	<30	No
	Illili	Evening	I/A	No
	Innisvale	Day	<30	No
	Innisvale	Evening	I/A	No
	Plainview	Day	35	No
	Plainview	Evening	NM	No
	Woodlawn	Day	<30	No
	Woodlawn	Evening	NM	No

6.4.4 Key Environmental Performance/Management Issues

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

6.4.5 Proposed Improvements to Environmental Management

Discussion with the EPA have indicated that quarterly attended noise monitoring will no longer be required. An application to remove attended noise monitoring from the sites EPL licence will be submitted during first quarter 2020.

6.5 Aboriginal Heritage Management

6.5.1 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 6.5.2. 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.

6.5.2 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 6.5.2

Table 6.5.2 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		

6.5.3 Key Environmental Performance/Management Issues

The axe grinding grove that is located south of the mine pit is covered with conveyer belting for preservation, and is inspected quarterly, and the location is included in the blast exclusion zone plans. Quarterly inspections found no impact on the heritage site. An environmental brief on heritage was presented to the workforce, to remind site personal on indigenous heritage awareness and obligations.

6.5.4 Proposed Improvements to Environmental Management

No improvements are proposed within the next reporting period.

6.6 Natural Heritage

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

6.7 Spontaneous Combustion

6.7.1 Environmental Management Measures

SCM is located within the Hoskissons Coal Seam which has been mined for over 120 years with a number of reported outbreaks of spontaneous combustion. Tests confirmed that coal from the SCM has the potential to spontaneously combust, and this was evident during the care and maintenance phase of the site. The Spontaneous Combustion Management Plan was reviewed in relation to the recommencement of operations, and monitoring of the affected areas has been ongoing.

Monthly site environmental inspection of the operations are carried out which include monitoring for signs (visual & odour) of spontaneous combustion. No evidence of spontaneous combustion in the pit were found during the reporting period.

An incident of spontaneous combustion occurred on the ROM stockpile in April 2019. Was reported to Resource Regulator Inspector. Area was treated by opening up and use of a watercart.

6.7.2 Key Environmental Performance/Management Issues

No incidence of in-pit spontaneous combustion occurred. One incident of ROM stockpile spontaneous combustion occurred.

6.7.3 Proposed Improvements to Environmental Management

Coal mining operations have ceased and all stockpiled coal has been removed from site. Implementation of the Closure MOP will ensure are carbonaceous material and material with a risk of spontaneous combustion will be buried at least 5m below final landform.

6.8 Bushfire Management

6.8.1 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.
- There are always at least one watercart on site that can be utilized for firefighting.
- A fully equipped firefighting trailer is kept onsite.
- Whitehaven Coal have engaged a firefighting contract company LRM Fire and Rescue on a retainer bases to assist in case of any fire breakout.
- Monthly inspection of site housekeeping and waste management to prevent build-up of waste and other fire risk issues.

6.8.2 Key Environmental Performance/Management Issues

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

6.8.3 Proposed Improvements to Environmental Management

No improvements are proposed within the next reporting period.

6.9 Environmental Performance Summary

An environmental performance summary for SCM is presented in 6.9.

Table 6.9 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	Numerous PM10 exceedances of the 24h limit of 50 µg/m³	Major impact from dust storms and regional smoke, ash and dusty conditions.	Ongoing implementation of the Air Quality Management Plan throughout Closure phase.
Biodiversity	EIS prediction of no impact on known koala population.	No recorded impact on koala population. No koala deaths recorded onsite.	Nil	Additional tree planting in the koala corridors
Heritage	EIS prediction of potential blast impact on a recorded site.	No recorded impact on site.	Nil	Heritage site inspected quarterly to ensure precautionary measures still in place. Blasting has ceased on site
Spontaneous Combustion	EIS prediction of no material spontaneous combustion	No in-pit spontaneous combustion found during the year.	Nil	Ongoing implementation of Spontaneous Combustion Management Plan throughout Closure phase.
Noise	35dB	No exceedances	Nil	Ongoing implementation of Noise Management Plan throughout Closure phase.
Blasting	<115dB overpressure	One blast exceeded the criteria	Nil- all blasting has ceased.	Nil.

7 WATER MANAGEMENT

The SCM lies within the catchment of the Namoi River. The majority 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 within the disturbed area of the mine limits the opportunity for discharge of runoff from mine-disturbed area, i.e. after appropriate settling time to satisfy licensed discharge criteria.

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, **Error! Reference source not found.**). 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, **Error! Reference source not found.**).

7.1.1 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).

7.1.2 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 7.1.2, locations are shown on **Error! Reference source not found.**, and complete surface water quality monitoring results are provided in Appendix 1.

Table 7.1.2 Summary Surface Water Monitoring Results

Storage	No. Samples	Oil and Grease	Conductivity µS/cm	pH
SD4	3	<5	233	7.4
Production Bore Dam	2	<5	3230	8.1
Void	3	<5	3870	8.6
SB4	3	<5	2383	7.5
SD3	1	<5	70	6.5
SB2	4	<5	4825	8.7
SD2	1	<5	1360	8.8

Quarterly monitoring results show that water quality within onsite storages was generally consistent with historical analysis. Due to dry conditions and high temperatures majority of water storages were dry during the year and only were able to be sampled intermittently.
All samples taken had no oil or grease present, conductivity had dropped slightly across the group, and pH slightly alkaline (8.2) in line with historic water quality for the area.

There were no wet weather discharges during the reporting period.

7.1.3 Key Environmental Performance/Management Issues

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

7.1.4 Proposed Improvements to Environmental Management

No improvements are proposed within the next reporting period.

7.1.5 Water Take

SCM groundwater licence (WAL 29537) is for 120 units from the Gunnedah - Oxley Basin. Groundwater Sources used during the reporting period was approximately 26.76ML with additional 26.8ML rainfall capture (Table 7.1.5).

Table 7.1.5 - Water Take

Extraction Point	Type	Monitoring	Extraction ML
Werona Bore	Bore hole	Flow meter	22.7ML
Bore in historic underground working	Bore hole	Flow Meter	4.06ML
Pit Void	Subsurface seepage into pit	Estimation based on modelling	16ML
Surface storage dams	Rainfall capture	Survey and estimation	26.8ML
		Total	**69.56ML**

Water storage on site at end of reporting year was limited to the in-pit void dam and the bore dam which receives water from the Werona bore.

7.2 Groundwater Management

7.2.1 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.

7.2.2 Groundwater Monitoring

The details of groundwater monitoring throughout the reporting period are listed in Table 7.2.2. Monitoring sites are shown in **Error! Reference source not found.** and complete monitoring datasets are provided in Appendix 2.

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

- Bore 27356 has not been monitored since June 2012, as there is a windmill over the bore which no longer functions.
- Standing Water Level (SWL) data is unavailable for bores 27356, 44884, 3709, and Werona due to pumps in place over the bores.

Table 7.2.2 - 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	Six monthly	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	Six monthly*5	
22497*1	N/A	"Coocooboonah"	Quarterly	Six monthly	
44677*1	N/A	"Werona"	Quarterly*5	Six monthly	
44884*1	N/A	"Lilydale"	Quarterly	Six monthly	
6249*1	N/A	"Lilydale"	Quarterly	Six monthly	
901460	GW901460 90BL249138	"Illili"	Quarterly	Six monthly*5	To determine existing status and any impacts
27356	GW027356 90BL020042	"Sunnyside"	Quarterly	Six monthly*5	
45061	N/A	"Coocooboonah"	Quarterly	Six monthly*5	
Werona Production	90BL255246	"Werona"	Quarterly	Six monthly*5	

*1 Non-Company owned bore *2 SWL – Standing Water Level *3 EC = Electrical Conductivity

*4 Company production bore

*5 – Not available this reporting period due to lack of access

7.2.2.1 Groundwater levels

Groundwater levels have lowered slightly in sync with reduced rainfall recharge, reduction is more or less constant across the monitoring area (Figure 7.2.2.1a & b). Piezometer P3 sits on

the western edge of the pit and was impacted by drought conditions as water levels are ephemeral and vary according to rainfall.

Figure 7.2.2.1a - Monitoring piezometer water depth

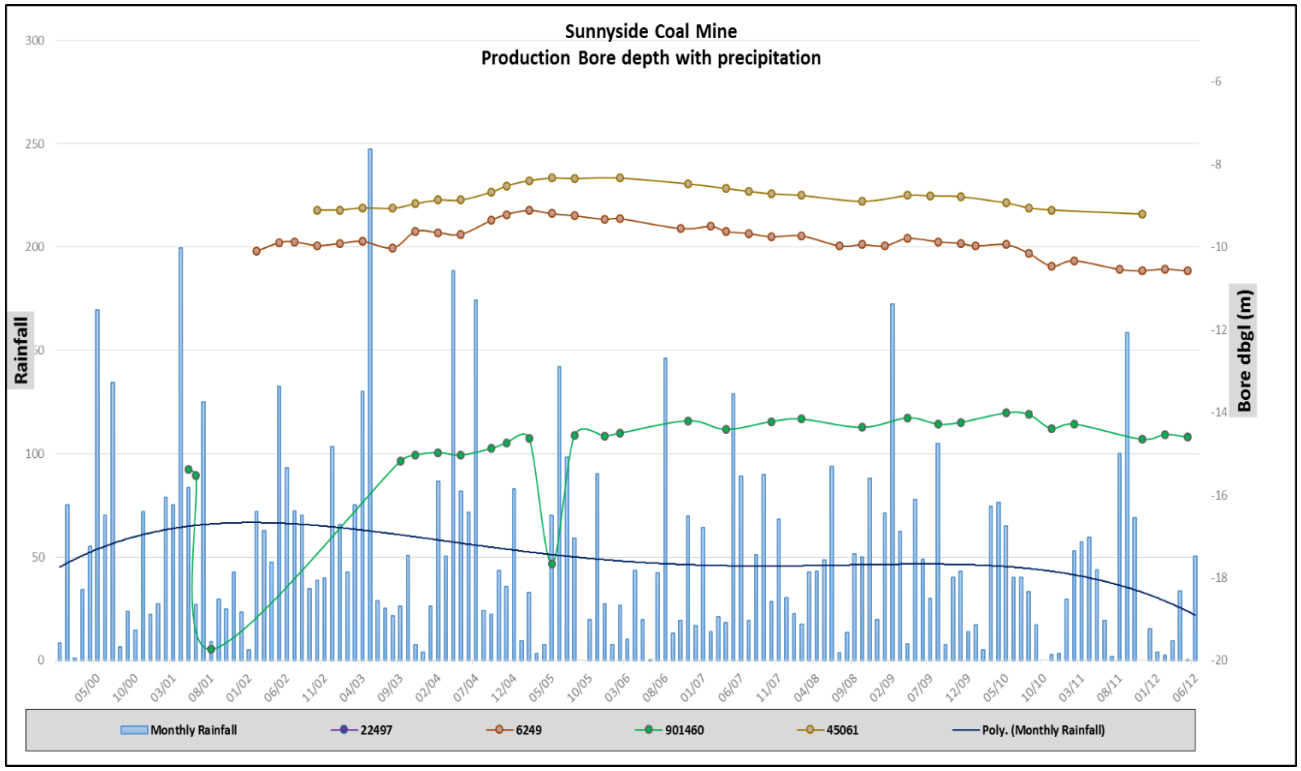
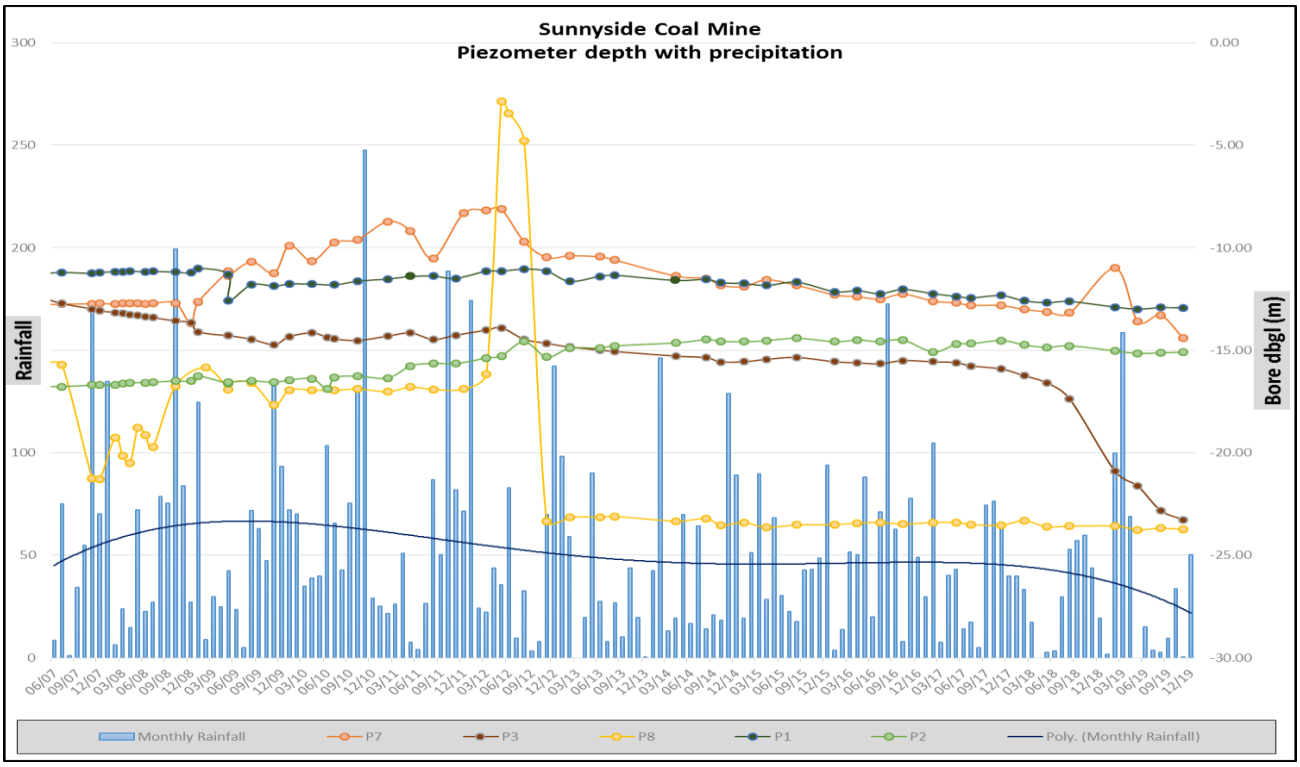


Figure 7.2.2.1b Production bore water depth



Groundwater quality

Analysis of samples taken during the reporting period has shown that groundwater quality has remained generally in line with historical data at all locations monitored. 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 constant quality (very low metals, and pH between7-8) across the monitoring region except for sodium and associated conductivity which varies depending on local geology and groundwater source. Sodium levels fluctuate from 110mg/l (Piezometer P8) to 21940mg/l (Piezometer P3). Piezometer P3 Total Dissolved Solids (TDS) levels (7,950 mg/L) were above the guidelines (4,000mg/L) at the end of the reporting period, but are within long-term values which range between (7,230mg/l to 9,890mg/l).

7.2.3 Groundwater Management

Inflows into the open cut result from a combination of:

- Direct rainfall runoff and infiltration through the emplaced overburden which flows down-dip to the open cut sump(s); and
- Inflows from the exposed coal seam.

This water is contained within the void itself, and within a separate void water dam within the pit.

Contamination of groundwater is controlled by the management of chemical, oil and grease spills and storage, with:

- Vehicle maintenance carried out in designated areas;
- Any spills being cleaned up; and
- Fuels, oil and grease being stored within a bunded area.

Groundwater from surrounding bores, as well as the mine production bore, is monitored on a regular basis to detect and assess any changes in groundwater quality or level that may be attributable to the mine.

7.2.4 Key Environmental Performance/Management Issues

Pumping from the Werona Production bore continued and due to dry conditions and shortage of water on site, water from the historic underground working was utilised from an access bore.

7.2.5 Proposed Improvements to Environmental Management

Water demand modelling and usage optimisation will be undertaken to deal with drought conditions.

8 REHABILITATION

8.1 Rehabilitation Performance during the Reporting Period

8.1.1 Status of Mining and Rehabilitation

The status of mining and rehabilitation at the completion of the reporting period is presented in **Error! Reference source not found.**. For next reporting period only temporary water infrastructure will remain for rehabilitation, they will be kept operational for up to five years. Total mine footprint increase by 0.5h due to highwall reshaping to get slopes to required angle. Sections of previously recorded rehabilitation on the overburden dump were disturbed to reduce dump height and for landform re-profiling.

Table 8.1.1 Rehabilitation Status

Mine Area Type [1]	Previous Reporting Period	This Reporting Period (Actual)	Next Reporting Period (Forecast)
	2018	2019	2020
A. Total Mine Footprint	127.42	127.92	127.92
B. Total Active Disturbance	74.60	74.22	17.73
C. Land Being Prepared for Rehabilitation	0	36.01	
D. Land Under Active Rehabilitation	31.2	17.69	110.19
E. Completed Rehabilitation	0	0	0

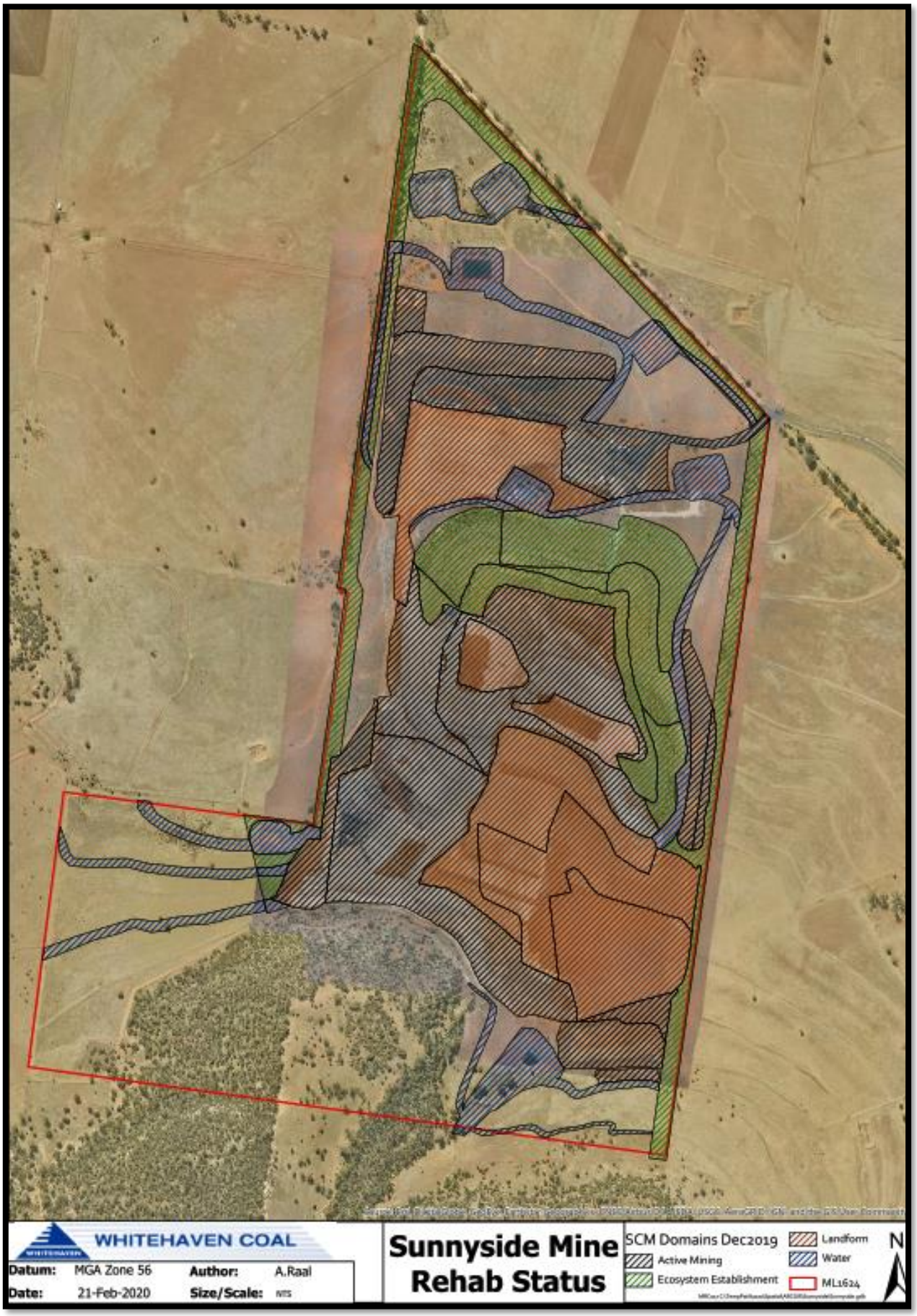
[1] Refer Annual Review Guideline (p.11) for description of mine area types.

8.1.2 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 28.8 hectares (ha) of land rehabilitated with woodland species to enhance biodiversity values of the area, with additional, ±17.6 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. Areas to be rehabilitated to pasture will be around 53ha.

Figure 5 Status of Mining and Rehabilitation



8.1.3 Rehabilitation Undertaken

Total mine footprint increase by 0.5h due to highwall reshaping to get landform to required slope angle. Sections of previously recorded rehabilitation on the overburden dump were disturbed to reduce dump height and for re-profiling of landform. Total land prepared for rehabilitation was 36.01ha. Additional 560 tube stock were planted along the koala corridors to enhance habitat zones. Tube stock required ongoing fortnightly watering due to drought conditions.

For next reporting period all rehabilitation will be completed baring temporary water infrastructure (17.73ha), which will remain for to five till rehabilitation has stabilise and is self-sustaining.

8.1.4 Rehabilitation Monitoring

Monitoring consists of;

- Quarterly monitoring for weeds and feral animals by Hunter Land Management (HLM) and a consultant agronomic is use for weed identification and treatment recommendations.
- 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.
- Two camera traps were installed in 2018 to monitor for feral animal abundance and wildlife movement.

8.1.5 Weeds Management

A site wide program of weed spraying was undertaken in August 2019 targeting, saffron thistle and broad leaf weeds. Boxthorn and prickly pear were not treated due to drought conditions and plants being in a state of dormancy.

8.1.6 Renovation or Removal of Buildings

As part of closure and decommissioning all infrastructure on the ROM pad was removed this included a prefabricated office unit, portable crusher, weigh bridge, underground electrical cables, conveyor gantry and associated concrete footings.

8.1.7 Other Rehabilitation Undertaken

Test pitting using an excavator for the identification of carbonaceous material within 5m of final landform was undertaken across areas of the overburden dump. Any carbonaceous material found was removed and buried at appropriate depth within the void.

8.1.8 Departmental Sign-off of Rehabilitated Areas

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

8.1.9 Variations in Activities against MOP/RMP

Sunnyside closure MOP was approved in January 2019. There were no variations against the Closure MOP.

Sunnyside Mine operated between the 19th January 2019 and the 22 January 2019 without an approved MOP and was issued a penalty Notice for the infringement.

8.1.10 Trials, Research Projects and Initiatives

No rehabilitation trials, research projects or other initiatives were undertaken during the reporting period. Redesign of final void landform to make it free draining.

8.1.11 Key Issues to Achieving Successful Rehabilitation

Three key issues to achieving successful rehabilitation are:-

- Design of final landform stability and drainage,
- Having good quality growth medium/topsoil, and
- Burial of all carbonaceous material at depth.

Final landform design is given in the approved Closure MOP. Gypsum and other soil ameliorants will be applied as required to ensure a good quality growth medium.

8.2 Actions for Next Reporting Period

- Decommissioning and removal of remaining infrastructure from site a par to final rehabilitation.
- Completion of bulk earthworks, and placement of topsoil for all disturbed areas excluding water infrastructure which will remain for up to an additional 5years till rehabilitation is self-sustaining.

- Seeding and planting of areas as far a practical depending on meteorological conditions.
- Infill planting of tree tube stock, in the koala habitat zone to replace dieback due to drought and animal predation.

9 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 9. Due to the low number of complaints graphing the data is not practical.

Table 9 - Rehabilitation Status

Community complaints			
Year	**Number of complaints**	**Aspect**	**Comment**
2019	None		
2018	1	Water	Metallic taste in rainwater tank
2017	None		
2016	1	Air quality	Odor and fumes from mine
2015	None		
2014	None		

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 regionally by Whitehaven Coal corporate office.

10 INDEPENDENT AUDIT

An Independent Environmental Audit (IEA) was undertaken by ERM in 2019.

Non-compliances with project approvals identified by the IEA were risk ranked by the auditor in accordance with the compliance status key for

Table 1b, and SCM subsequently developed an Audit Action Plan for these non-compliances. Items from the 2019 Audit Action Plan, and their due date, are summarised in Table 10. Approval of audit findings and actions was only approved after the reporting period. All non-ongoing actions have been completed.

Table 10 2019 IEA Outstanding Action Table

Condition/Plan	IEA Proposed Action	IEA Action Plan Timing
Minister's Conditions of Approval PA 06_0308		
3.2.7	Water Management Plan to be updated in accordance with Schedule 5 Condition 5.	31 January 2020
5.5A	Develop document and record tracking system.	31 January 2020
Minister's Conditions of Approval PA 06_0308		
5.5A	Ensure that a review of management plans is undertaken to ensure alignment with the latest MOD and that this review and future reviews consider the Rehabilitation and Landscape Management Plan.	31 January 2020
5.10	Ensure monthly EPL monitoring data is included within the Published Monthly EPL monitoring data published on the website. Ensure complaints are updated on the website on a monthly basis. Where no complaints are received, upload a complaint register stipulating this.	31 January 2020
Statement of Commitments		
5.3	In the next modification of the CoA, request an update of the SoC to remove timing requirements for removal of industrial waste.	Ongoing
9.16	Where mature vegetation clearing activities are conducted, ensure records of vegetation clearance permits are maintained.	31 January 2020
9.17	Where vegetation disturbance is to occur, ensure associated permit, inspection and control measures are in place to manage the potential identification and relocation of nesting and roosting hollows, as well as nests.	31 January 2020
12.5	Ensure that training provided to all staff and contractors, is appropriately detailed that it supports the commitment to "help raise awareness and ameliorate any impact on heritage sites".	27 December 2019
16.2	Develop formal induction kit for new non-local employees, where applicable.	31 January 2020
Mining Lease 1624		
3b	Ensure that when the MOP is next updated this inconsistency is removed.	To be included in next MOP amendment.
Water Management Plan		
3.2.7	Review and update WMP to establish groundwater trigger levels, benchmarks and contingency criteria. It should be noted that coal mining at SCM is now complete and therefore interaction with the groundwater due to this activity is now ceased.	31 January 2020

11 INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD

11.1 Reportable Incidents

One blasting incident occurred with an overpressure reading greater than 115dB was recorded on 7th June 2019. The potential cause of the overpressure was that the face orientation of the blast, using the Elliptical air blast methodology, contributed to the received overpressure at the Plainview monitor. A warning letter was issued by the Department of Planning and Environment on the 30th July 2019 for non-compliance with Schedule 3 Condition 10 of PA 06_0308. The blasting incidents are described in section 6.3.2.

A diesel fuel spill occurred on the 24th September 2019 while transferring fuel from the main fuel storage tank to site service tanker. Estimated spillage was between 200-300L. Spillage was limited to the surrounding hardstand area. No material harm to the environment occurred. An event notification and report was submitted to the EPA.

11.2 Non-compliances

All of the non-compliances with PA 06_0308 have been ranked as either administrative or low, with very limited potential for significant environmental harm, and are addressed below.

- Conditions 3(10) of PA 06_0308, and L5.1 of EPL 12957 require that blast overpressure not exceed 115dB for more than 5% of total blasts. This was exceeded by SCM on 7th June 2019, as described in Section 6.3.2. Investigation into the exceedance determined that potentially the face orientation of the blast contributed to the received overpressure at the Plainview monitor. No further production blasts are planned to be undertaken for the SCM.
- Condition 3(18) of PA 06_0308 requires that particulate matter emissions generated by the development do not cause exceedances of the criteria provided in the Project Approval. As described in Section 6.1.3, the daily 24hr 50 µg/m^3 criteria was exceeded on 12 occasions throughout the reporting period, which resulted in an exceedance of the annual average criteria of 30 µg/m^3, with an annual average of 37.58 µg/m^3. This exceedance was deemed to be a result of elevated PM10 levels across the entire state, caused by a combination of bushfire smoke and dust storms.
- Condition 3(a) of Mining Lease 1624. Sunnyside Mine operated between the 19th January 2019 and the 22 January 2019 without an approved MOP.

11.3 Regulatory Actions

A warning letter was issued by the Department of Planning and Environment on the 30th July 2019 for non-compliance with Schedule 3 condition 10 of PA 06_0308 for the blast non-compliances.

A penalty notice was issued by the Resource Regulator for operating without an approve MOP for the period between 19 January 2019 to 22 January 2019.

SCM received a Section 240 Notice from the Department of Planning and Environment Resource Regulator on the 18th April 2019. This notice required the submission of a Final Sunnyside Coal Mine Rehabilitation Report by 29th November 2019, and detailed a number of required inclusions. Aspect Ecology was engaged to complete the report, and it was submitted on the 29th November 2019.

12 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:-

- Undertake closure and rehabilitation activities in accordance with the MOP;
- The continuation of environmental monitoring and management;
- Review and revision of various Environmental Management Plans; and
- Continued community liaison and engagement with local stakeholders.

Appendix 1

SURFACE WATER MONITORING DATA

Appendix 2

GROUNDWATER MONITORING DATA