

# 2019 Annual Review

for the

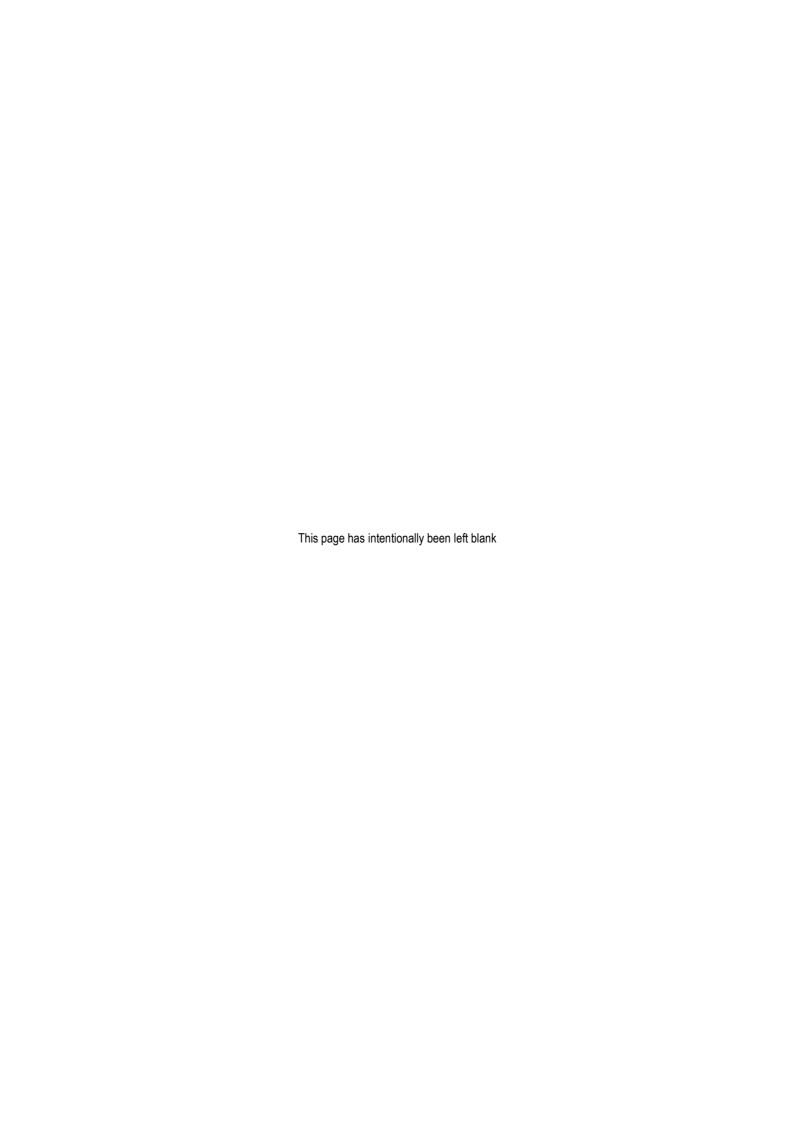
# New Berrima Clay/Shale Quarry

Project Approval PA08\_0212 Mining (Mineral Owner) Lease 6

Prepared in Conjunction with:



February 2020





ABN: 52 000 005 550

# 2019 Annual Review

### for the

# **New Berrima** Clay/Shale Quarry

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Ref No. 744/29 February 2020



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New Berrima Clay/Shale Quarry

**2019 ANNUAL REVIEW** 

#### Title Block

Name of Operation	New Berrima Clay/Shale Quarry
Name of Operator	The Austral Brick Company Pty Limited
Project Approval #	08_0212
Name of holder of Project Approval	The Austral Brick Company Pty Limited
Mining Lease #	M(MO)L6
Name of holder of mining lease	The Austral Brick Company Pty Limited
Water licence #	Not Required
Name of holder of water licence	Not Required
MOP/RMP start date	19 September 2018
MOP/RMP end date	31 August 2025
Annual Review start date	1 January 2019
Annual Review end date	31 December 2019

I, Peter Young-Whitford, certify that to the best of my knowledge this audit report is a true and accurate record of the compliance status of The Austral Brick Company Pty Limited for the period 1 January 2018 to 31 December 2018 and that I am authorised to make this statement of behalf of The Austral Brick Company Pty Limited.

- 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.
- The Crimes Act 1900 contains other offences relating to false and misleading information: Section 192G (Intention to defraud by false or misleading statement - maximum penalty 5 years imprisonment); Section 307A, 307B and 307C (false or misleading application/information/documents - maximum penalty 2 years imprisonment or \$22,000, or both).

Name of authorised reporting officer	Peter Young-Whitford
Title of authorised reporting officer	Raw Materials and Mining Manager
Signature of authorised reporting officer	Raie.
Date	28 February 2020

#### THE AUSTRAL BRICK COMPANY PTY LIMITED

New Berrima Clay/Shale Quarry

**2019 ANNUAL REVIEW**Report No. 744/29

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New Berrima Clay/Shale Quarry

#### 1. STATEMENT OF COMPLIANCE

The compliance status of relevant approvals was reviewed for the reporting period and is summarised in **Table 1**. It was determined that there were no non-compliances during the reporting period.

Table 1
Statement of Compliance

Were all conditions of the relevant approval(s) complied with?	Yes / No
Project Approval 08_0212	Yes
Mining (Mineral Owners) Lease 6	Yes

#### 2. INTRODUCTION

#### 2.1 OVERVIEW OF OPERATIONS

The New Berrima Clay/Shale Quarry is located approximately 1.5km east of New Berrima in the Southern Highlands region of New South Wales (see **Figure 1**). Project Approval 08\_0212 was granted on 6 July 2012 and modified on 26 November 2015 and 6 July 2017. The approved layout of the Site is shown in **Figure 2** with surrounding land ownership and residences shown in **Figure 3**. Whilst Project Approval 08\_0212 has been physically commenced, to date, construction and operational activities have not yet commenced.

#### 2.2 SCOPE AND FORMAT

This Annual Review for the New Berrima Clay/Shale Quarry ("the Quarry") has been compiled by The Austral Brick Company Pty Limited ("Austral") in conjunction with R.W. Corkery & Co. Pty Limited.

This is the fourth Annual Review submitted for the Quarry and is applicable for the period 1 January 2019 to 31 December 2019 ("the reporting period"). The information presented within this Annual Review has been prepared based on information compiled by R.W. Corkery & Co. Pty Limited and provided by Austral.

This Annual Review has been compiled in accordance with *Condition 5(4)* of Project Approval 08\_0212, generally follows the format and content requirements identified in the *Annual Review Guideline* dated October 2015 and includes relevant information as required by the following conditions of Project Approval 08\_0212.

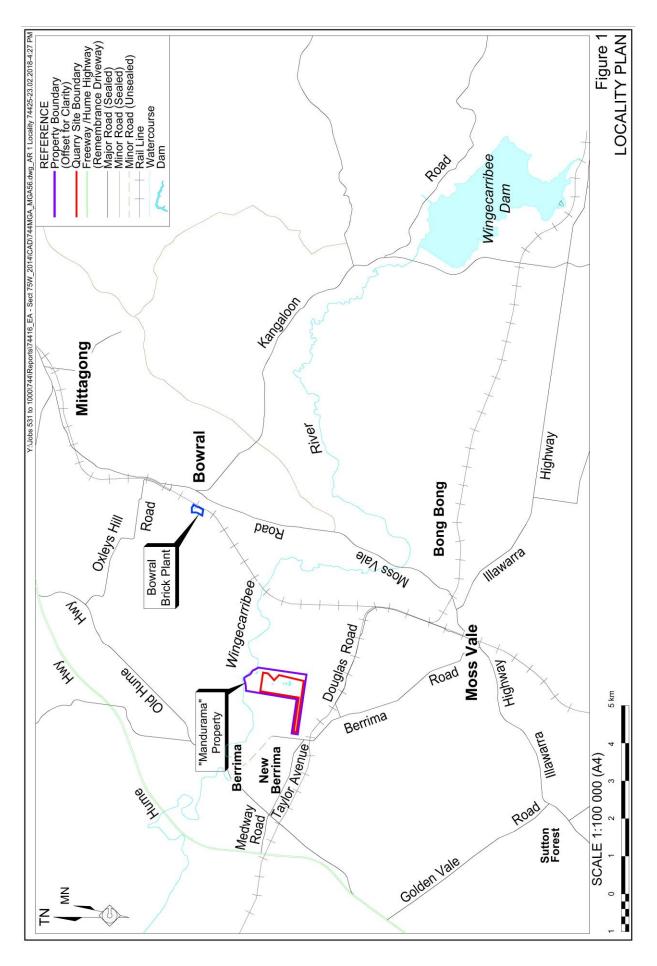
- Condition 2(15b): Production Data.
- *Condition 3(31)*: Waste Management.
- *Condition 5(11a)*: Public Display.

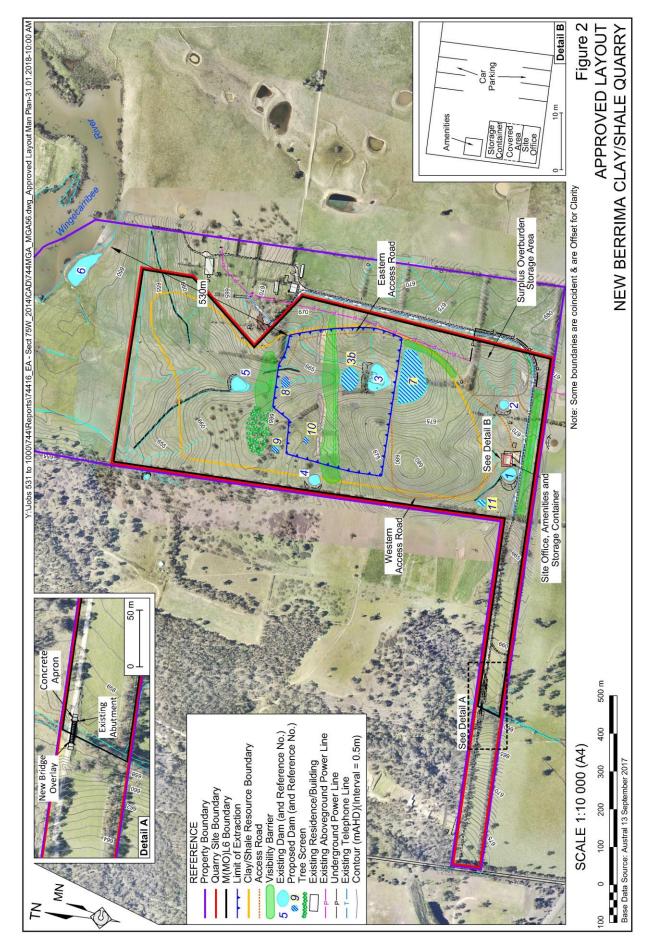
#### 2.3 KEY PERSONNEL CONTACT DETAILS

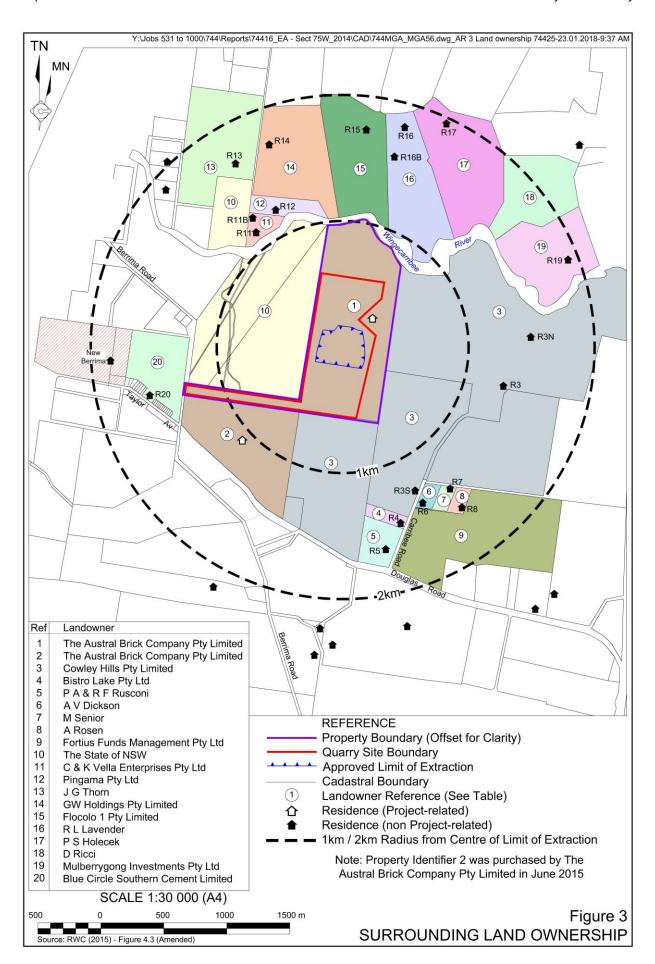
The key personnel contact names, position and phone numbers are as follows.

Name	Position	24 Hour Contact
Peter Young-Whitford	Raw Materials and Mining Manager	0412 611 714
Cassandra Steppacher	NSW Environmental Coordinator	0425 341 106









#### 3. APPROVALS

The Quarry is required to operate in accordance with the approvals and licences listed in **Table 2**.

Table 2

New Berrima Clay/Shale Quarry – Approvals and Licences

Consent/Lease/Licence	Issue Date	Expiry Date	Details / Comments
Project Approval 08_0212	6/07/2012	31/12/2045	Issued by the (then) Minister for Planning and Infrastructure and last modified 6 July 2017.
Mining (Mineral Owners) Lease 6	27/06/17	27/06/2038	Granted by the Secretary of the Department of Planning and Environment.
Environment Protection Licence 20377	1/08/2016	Renewed annually	Issued by NSW Environment Protection Authority. Current version dated 9 October 2019.

The processing of a variation application for EPL 20377, lodged in March 2018, was finalised during the reporting period with the current licence version dated 9 October 2019. There were no other modifications or variations to these approvals or licences during the reporting period.

The compliance reviews for Project Approval 08\_0212 and M(MO)L6 included in **Appendices 1** and **2** reflect the conditions relevant as at the end of this reporting period. A separate Annual Return also continued to be submitted to the NSW EPA in accordance with the requirements of Environment Protection Licence 20377 and is not further reported in this document.

A Section 138 Road permit, DA 17/1477, was previously issued by Council 30 August 2018 for an upgrade to the intersection of the Quarry access road and Berrima Road to accommodate B-Double vehicles. This permit does not contain any conditions relevant to the ongoing operation of the Quarry.

#### 4. OPERATIONS SUMMARY

#### 4.1 EXTRACTION OPERATIONS

No extraction operations were undertaken during the reporting period. **Table 3** provides the production summary.

Table 3 2019 Production Summary – tonnes

Material	Approved limit (specify source)	Previous reporting period (actual)	This reporting period (actual)	Next reporting period (forecast)
Waste Rock / Overburden	Not Specified	0	0	0
ROM <sup>1</sup>	NA	-	-	-
Coarse Reject <sup>1</sup>	NA	-	-	-
Fine Reject <sup>1</sup>	NA	-	-	-
Saleable Product (Extractive Material)	150 000t [PA 08_0212 <i>Condition 2(7)</i> ]	0	0	0
Transported Product	150 000t [PA 08_0212 <i>Condition 2(8)</i> ]	0	0	0
Notes: 1. The Quarry does	s not generate 'Run of Mine' material, o	coarse or fine rejects.	•	•

No soil stripping operations were undertaken, and no soil material was spread. A total of approximately 700m<sup>3</sup> of topsoil material is currently stockpiled from physical commencement activities undertaken in 2016. The location of these stockpiles is shown on **Figure 4**.

#### 4.2 OTHER OPERATIONS

During the reporting period, Austral undertook a range of non-extractive activities. A summary of these activities is provided as follows and a selection of photographs as **Plates 1** to **6**.

#### **Exploration and Installation of Piezometers**

During July 2019 six percussion holes (STK025 to STK030) were drilled within the currently approved extraction area for quality control purposes. Samples were collected for test firing of the material. A further three percussion and two diamond drill holes (STK20S, STK20D, STK21, STK22 and STK23) were also drilled at four locations within and adjacent to the Quarry. The principal purpose for these additional holes was to better define the hydrogeological environment. These additional holes were converted to piezometers for ongoing groundwater monitoring in accordance with PA 08\_0212 Schedule 3 Condition 18A. **Plates 1** to **3** show examples of the drilling in progress and following completion.

All drilling was undertaken in accordance with a EP&A Act Part 5 approval issued by the Resource Regulator on 24 May 2019 and 8 and 12 July 2019 following submission of ESF4 applications. The location of the completed holes is shown in **Figure 4**.

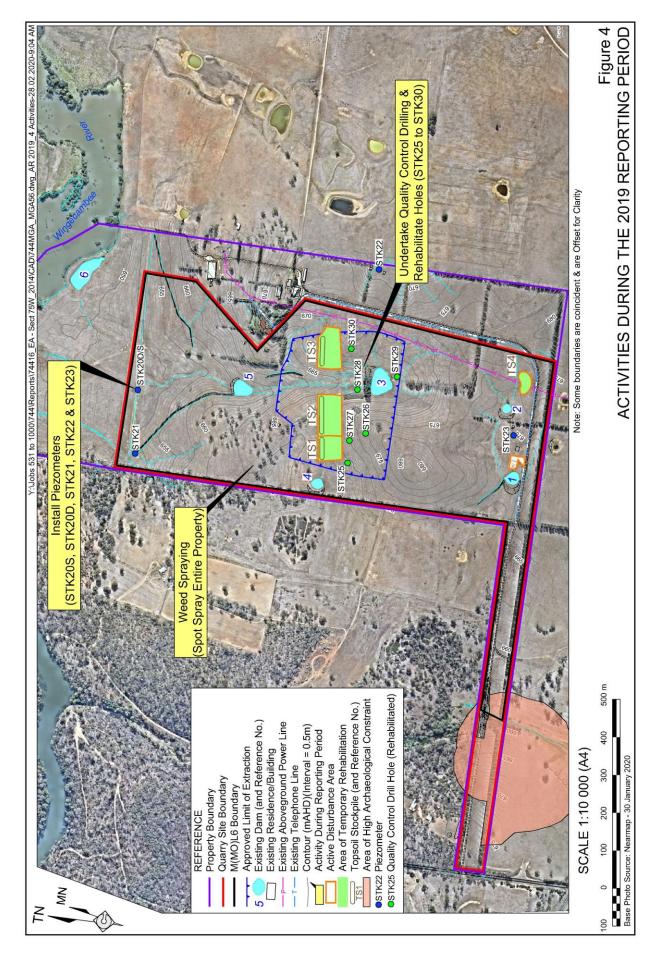




Plate 1: Quality Control Drilling In Progress – July 2019 Source: Austral Bricks

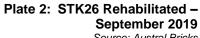








Plate 3: STK20S and STK20D **Piezometers Completed** Source: Austral Bricks

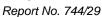


Plate 4: Meteorological Station – Mowed October 2019 Source: Austral Bricks





Plate 5: Weed Spraying -November 2019 Source: Austral Bricks

Plate 6: Oblique Aerial of Quarry Site - January 2020

Source: Austral Bricks



#### **Environmental Management, Monitoring and Community Liaison**

The entire Quarry Site was sprayed during November 2019 (**Plate 5**) for broad leaf weeds and African Boxthorn. Environmental monitoring also continued throughout the reporting period including meteorological, deposited dust and surface water quality monitoring. Results of this monitoring are summarised in Sections 6 and 7. Maintenance and calibration of the meteorological station was also completed during the reporting period (**Plate 4**)

The community consultative committee also continued to meet during the reporting period. Details of these meetings are summarised in Section 9.

#### **Management Plan Review and Update**

Feedback from the Natural Resource Access Regulator (NRAR) was received on 27 February 2019 in relation to the updated Water Management Plan and acceptance of the proposed groundwater monitoring network was received 27 May 2019. A final response to NRAR and updated Water Management Plan incorporated the completed piezometers is planned to be finalised during the first quarter of the next reporting period.

#### **Overhead Powerline**

During the 2018 reporting period plans for the rerouting of the overhead powerlines above the Surplus Overburden Stockpile areas were submitted to Endeavour Energy for approval. Endeavour Energy have reviewed the plans and design and are currently processing the approval. No physical works have been undertaken to date with approval and rerouting expected during the next reporting period.

#### 4.3 NEXT REPORTING PERIOD

Activities planned to be undertaken during the next reporting period are summarised as follows and displayed on **Figure 5**.

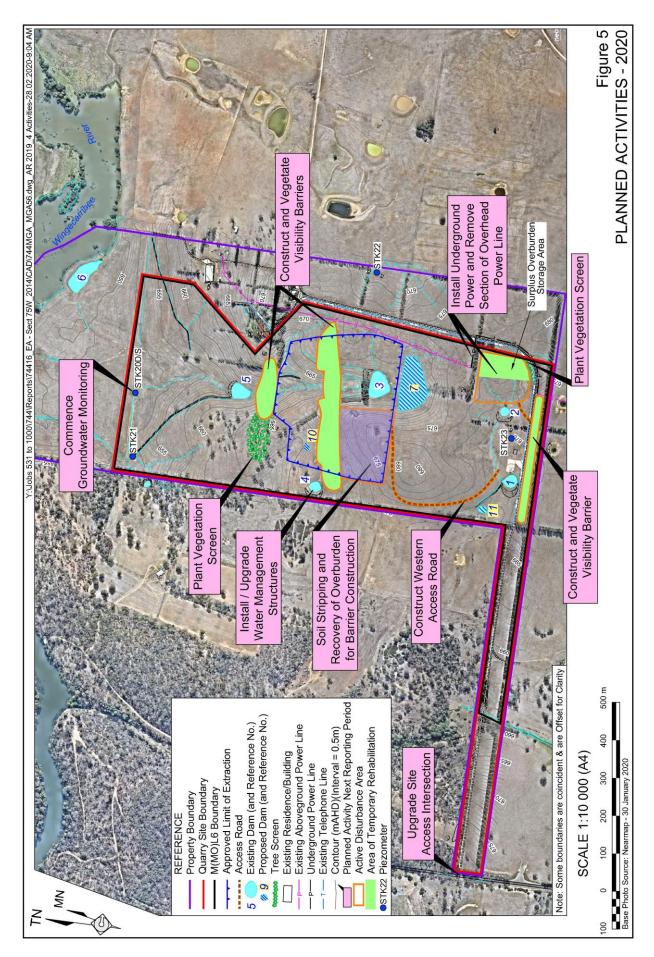
#### **Land Preparation and Construction**

The following construction / land preparation activities are planned to commence in the next reporting period.

- Construction and upgrade of water management structures (dams and diversion drains) in accordance with the updated Water Management Plan.
- Construction of the northern, central and southern visibility barriers utilising overburden recovered from the extraction area.
- Construction of the western access road.
- Rerouting of the overhead powerlines above the Surplus Overburden Stockpile area.

#### **Extraction**

Clay/shale extraction operations are not expected to commence for several years pending production requirements at the Bowral Brick Plant. However, overburden will be recovered in order to construct the visibility barriers.



#### Rehabilitation

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No areas will become available for final rehabilitation during the next reporting period. However, temporary revegetation of the visibility barriers, including establishment of a stabilising pasture cover and planting of the top and northern slopes of the central and northern barriers and the southern slope of the southern barrier with tubestock of native shrubs and trees. Planting of the tree screen west of the Northern Visibility Barrier and southeastern periphery of the Surplus Overburden Stockpile Area will be undertaken in accordance with the measures detailed in the approved Landscape Management Plan and Water Management Plan. General property maintenance, including weed control and slashing, will also be undertaken as required.

#### **Environmental Monitoring and Community Liaison**

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

• Meteorological conditions.

• Dust deposition.

• Surface water quality.

• Noise levels.

• General inspections for water management and maintenance.

The community consultative committee will also continue to meet during the next reporting period at intervals determined by the committee.

#### **Management Plans**

It is expected that the updated Water Management Plan will be submitted for approval by DPIE during the first quarter 2020.

# 5. ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEW

The 2018 Annual Review was submitted to the former DPE and Resources Regulator on 28 February 2018 in accordance with the requirements of PA 08\_0212 and M(MO)L6. Copies were also provided to Wingecarribee Shire Council, Water NSW and NRAR.

DPE confirmed their satisfaction of the Annual Review on 4 April 2019. No specific actions arose from their review of the Annual Review. A reminder was included to make a copy of the Annual Review available on the Company website and ensure any other requirement documentation is up to date. The Annual Review was uploaded to the Company website and relevant data / documentation has been kept up to date throughout the reporting period.

Excluding an acknowledgement of receipt from the Resources Regulator on 1 March 2019, no response was received from the Resources Regulator. Whilst not a requirement, Water NSW confirmed on 21 March 2019 that they had no comments.

#### 6. ENVIRONMENTAL PERFORMANCE

#### 6.1 INTRODUCTION

A summary of environmental performance for the principal environmental aspects is provided in **Table 4**. Further detail regarding specific environmental aspects is also provided in the following subsections. Environmental performance relating to water is discussed in Section 7.

Table 4
Relevant Environmental Performance Aspects

Aspect	Approval criteria/ (EIS prediction)	Performance during the reporting period	Trend/key management implications	Implemented/proposed management actions
Noise (Barrier construction)	43dB(A) during the day at receiver R2. 38dB(A) at all other receivers.	No barrier construction activities were undertaken during the reporting period.  No complaints and no issues raised through the CCC.	No trends identifiable. Currently no management implications.	No specific management measures implemented or currently proposed.  Noise monitoring planned during the construction of the visibility barriers.
Noise (operations)	38dB(A) at all receivers.	No complaints and no issues raised through the CCC.	No trends identifiable. Currently no management implications.	No specific management measures implemented or currently proposed.
				Operational noise monitoring planned following commencement of extraction activities.
Blasting	Blasting is not an approved activity.	No blasting undertaken.	Nil.	Nil.
Air Quality	PM <sub>10</sub> 24hr = 50μg/m <sup>3</sup> PM <sub>10</sub> Annual = 30μg/m <sup>3</sup> TSP Annual = 90μg/m <sup>3</sup> Dep Dust Annual = 4g/m <sup>2</sup> /month	No exceedances of annual average deposited dust and no complaints or issues raised through the CCC.	No trends identifiable. Currently no management implications.	No specific management measures implemented or currently proposed.  Monthly deposited dust monitoring will continue in accordance with the Air Quality Management Plan.
Biodiversity	No significant impacts predicted.	No operational activities or activities relating to biodiversity aspects occurred.	No trends identifiable. Currently no management implications.	No specific management measures implemented or currently proposed.
Landscape and Visual	Implement Landscape Management Plan.	No complaints or issues raised through the CCC.	Currently no management implications.	Visibility barriers to be constructed and tree screens planted during next reporting period.
Heritage	Implement Aboriginal Cultural Heritage Management Plan.	Aboriginal heritage training completed by key Austral personnel to improve the delivery of Aboriginal heritage content during inductions. Due diligence fencing of area of high archaeological constraint to ensure no inadvertent access.	Currently no management implications.	Induction of all employees by Austral personnel trained in accordance with the Aboriginal Heritage Management Plan.

#### 6.2 METEOROLOGICAL MONITORING

Austral installed a meteorological station (see **Figure 6**) in September 2016. The meteorological station complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

A summary of the temperature and rainfall data for the reporting period is provided in **Table 5** whilst **Figure 7** presents the monthly wind roses. Daily rainfall records for the reporting period are presented in **Appendix 3**.

Table 5
Summary of 2019 Temperature and Rainfall Records (On-site Station)

	To	emperature (	(°C)	Poinfall (mm)
Month	Average	Maximum	Minimum	Rainfall (mm)
January	22.4	39.0	12.6	54.6
February	18.8	34.9	7.0	7
March	17.4	32.3	5.3	115.4
April	14.4	25.7	2.2	9
May	10.5	21.9	0.2	13.6
June	7.8	17.9	-2.9	61.4
July	7.8	17.9	-1.1	9.6
August	7.4	18.6	-2.8	21
September	10.6	24.1	-2.6	43
October	14.3	30.6	1.0	18.8
November	17.2	35.4	4.4	10.4
December	19.1	40.4	7.6	1.2
Total	-	-	-	365.0

A total of 365.0mm of rain was recorded from 1 January 2019 to 31 December 2019, well below the long-term (149 year) average rainfall of 955.4mm recorded at the nearby BoM Moss Vale (Hoskins St) Station (No. 068045). Notwithstanding, two moderate intensity rain events occurred during the reporting period, including 31.4mm on 17 March 2019 and 35.6mm on 4 June 2019 (see **Appendix 3** and **Figure 8**).

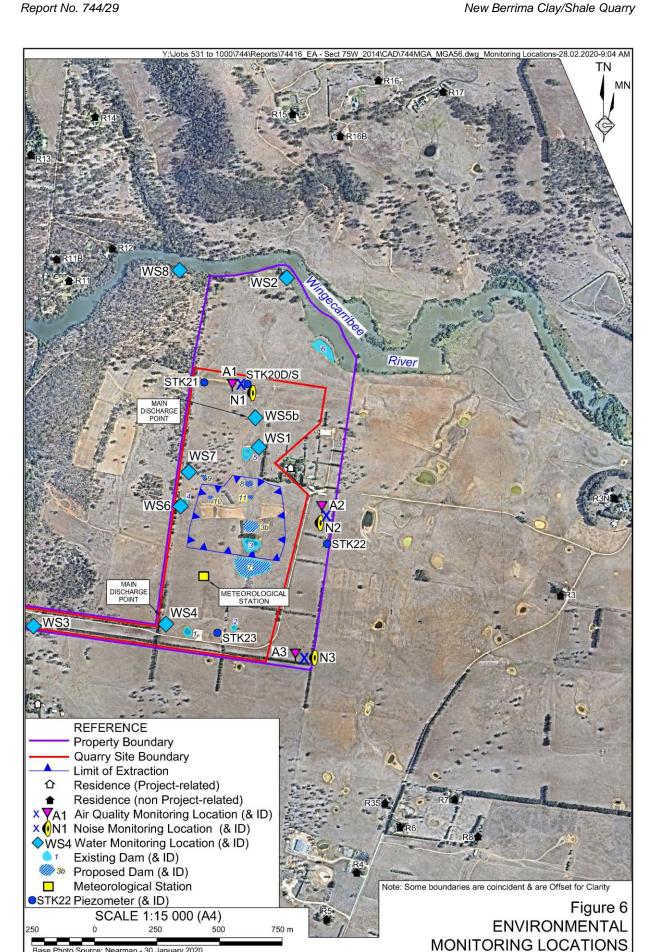
#### 6.3 AIR QUALITY

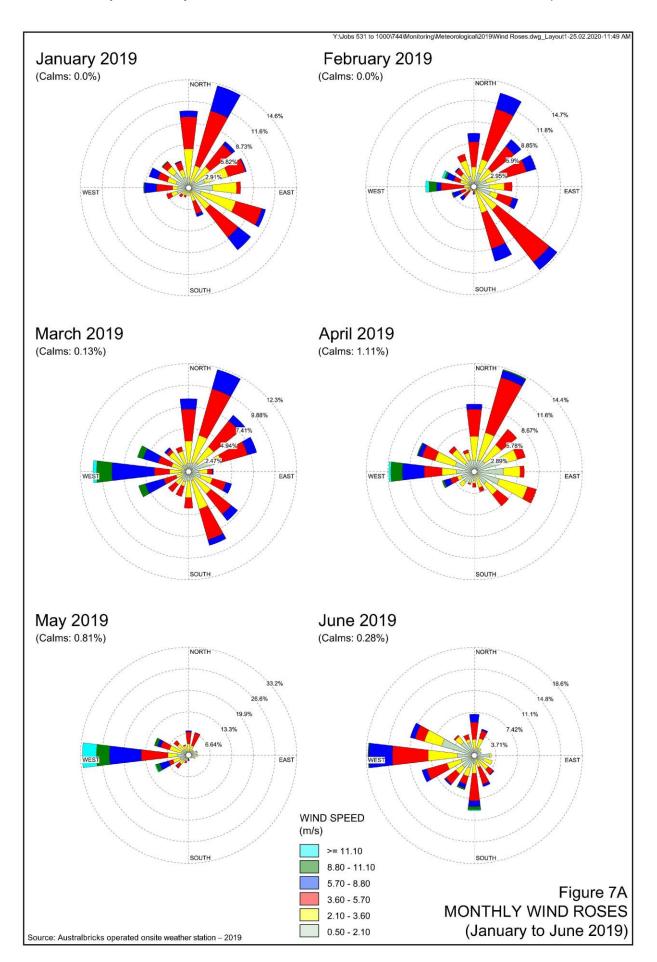
#### **Environmental Management**

As no earthmoving or extraction activities occurred during the reporting period, no specific dust mitigation measures were required.

#### **Environmental Performance**

Austral continued to collect air quality samples from three deposited dust gauges, Sites A1, A2 and A3 (see **Figure 6**), throughout the reporting period. The results of the dust monitoring are summarised in **Table 6** and presented graphically in **Figure 8**. The monthly insoluble solids over the reporting period ranged from  $0.1g/m^2/month$  to  $2.7g/m^2/month$ . The highest monthly insoluble solids of  $2.7g/m^2/month$  was recorded at Site A3 during August 2019.





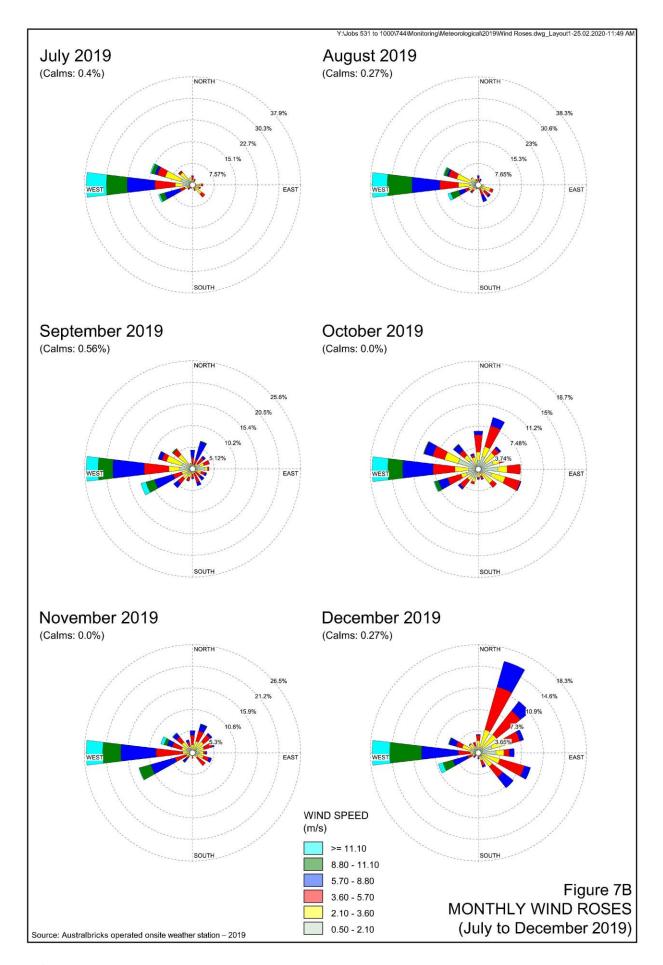
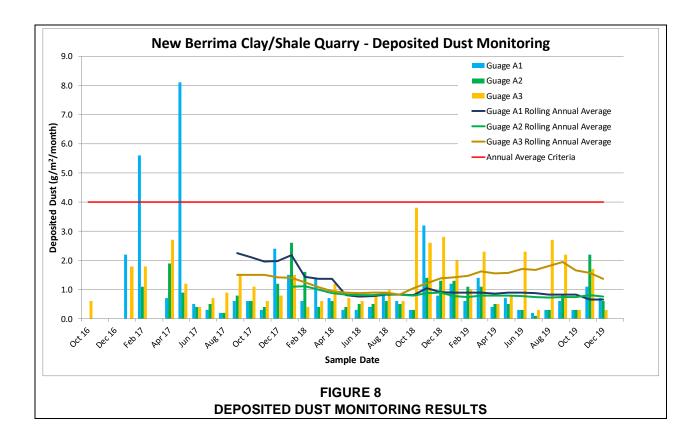


Table 6
Deposited Dust Monitoring Results

				N	/lonthl	y <sup>1</sup> Dust Dep	osition Rate	g/m²/	month)			
				A1			A2			А3		
SAMPL	SAMPLING PERIOD		Insoluble	Rolling Annual Average	Annual Ash		Rolling Insoluble Annual Average		Insoluble	Rolling Annual Average	Ash	
29/12/18	to	28/01/19	1.2	0.9	0.8	1.3	0.8	1.0	2.0	1.4	1.3	
29/01/19	to	28/02/19	0.6	0.9	0.5	1.1	0.7	1.0	1.0	1.5	0.8	
01/03/19	to	30/03/19	1.4	0.9	1.1	1.1	0.8	8.0	2.3	1.6	1.9	
31/03/19	to	29/04/19	0.4	0.9	0.1	0.5	0.8	0.2	0.5	1.6	0.1	
30/04/19	to	30/05/19	0.7	0.9	0.5	0.5	0.8	0.3	0.8	1.6	0.5	
31/05/19	to	30/06/19	0.3	0.9	0.2	0.3	0.8	0.2	2.3	1.7	1.8	
01/07/19	to	31/07/19	0.2	0.9	0.1	0.1	0.8	0.1	0.3	1.7	0.2	
01/08/19	to	31/08/19	0.3	0.8	0.2	0.3	0.7	0.1	2.7	1.8	2.1	
01/09/19	to	30/09/19	0.6	0.8	0.5	0.8	0.8	0.6	2.2	1.9	1.7	
01/10/19	to	31/10/19	0.3	0.8	0.2	0.3	0.8	0.3	0.3	1.7	0.3	
01/11/19	to	30/11/19	1.1	0.7	0.9	2.2	0.8	1.8	1.7	1.6	1.3	
01/12/19	to	31/12/19	0.7	0.7	0.4	0.6	0.8	0.6	0.3	1.4	0.3	
Source: A	ustral	Bricks.										



The rolling annual average monthly deposition rates for the reporting period were between  $0.7g/m^2/month$  and  $1.9g/m^2/month$ , which is significantly below the criteria of  $4g/m^2/month$ , indicating good air quality with respect to dust deposition. Further data collection is required

before any trends can be firmly established, however, since October 2018 the average dust levels at gauge A3 has been consistently higher than gauges A1 and A2 and may be the result of adjacent agricultural activities and use of the property access road.

#### **Reportable Incidents and Further Improvements**

No complaints were received and no reportable incidents relating to air pollution occurred during the reporting period. No further improvements relating to air pollution are currently considered necessary, however, it is noted that it is planned to seal the Quarry/property access road during the next reporting period to minimise dust during operations. This will also reduce potential for dust generation from general property access. With the planned commencement of earthmoving activities, management controls during the next reporting period will also be implemented consistent with the approved Air Quality Management Plan. Whilst results have remained well below the applicable criteria, ongoing review of surrounding activities will be undertaken to determine any correlation with results recorded at gauge A3.

#### 6.4 ABORIGINAL HERITAGE

#### **Environmental Management**

Four key Austral personnel have previously undertaken Aboriginal heritage induction training in accordance with the Aboriginal Heritage Management Plan. The training was completed on 28 November 2018 by a Senior Archaeologist from Biosis. This training will assist in improving Aboriginal cultural awareness and the delivery of Aboriginal cultural information and requirements during site inductions.

Whilst not a commitment, in addition to the management measures outlined within the Aboriginal Heritage Management Plan, Austral installed rural fencing during October 2018 to minimise the risk of inadvertent access to the areas identified as being of high archaeological constraint. No additional management measures were required during the reporting period.

#### **Environmental Performance, Reportable Incidents and Further Improvements**

No Aboriginal heritage sites were identified during the reporting period and no further improvements are currently deemed necessary. No reportable incidents occurred during the reporting period.

#### 6.5 WASTE MANAGEMENT

All wastes generated during the drilling of the piezometers and quality control holes was removed from site. Specifically all:

- drilling fluids and muds were captured and stored within 11 IBCs (total 11 000L) which was removed by JR Waste and Recycling for offsite disposal;
- drill cuttings and cores were taken to the Horsley Park Brick Plants either for geological interpretation or raw material for use in sample testing; and
- lunch wastes generated by drilling personnel were removed from site each day with no waste receptacles required.

The on-site portaloo was also pumped out on 25 September 2019 by Southcoast Liquid Treatment Pty Limited.

No additional waste reduction or management measures were required during the reporting period and no specific improvements are planned for the next reporting period other than provision of waste receptacles, as needed, during site establishment activities.

New Berrima Clay/Shale Quarry

#### 7. WATER MANAGEMENT

#### 7.1 **WATER TAKE**

During the reporting period, no water was accessed or obtained for the purpose of facilitating Quarry operations. As outlined within the Water Management Plan, the existing and planned water storages on site will either be exempt from the harvestable right dam capacity (being for pollution control purposes) or within the harvestable right dam capacity for the property. As a result, water licencing is not required. Notwithstanding, the volume of water utilised for Quarry operations will be reported within the respective Annual Reviews.

It is noted that Water Supply Works and Water Use Approval 10CA102968 and associated Water Access Licence 25683 issued on 1 July 2011 for accessing water from the Wingecarribee River are used solely for irrigation purposes within the Mandurama property. No water was accessed under this licence for Quarry purposes.

#### 7.2 SURFACE WATER

#### **Environmental Management**

As earthmoving and extraction activities did not occur during the reporting period, the principal management measure involved the maintenance of the existing farm dams. The soil stockpiles created in 2016 have been stabilised with no further management required during the reporting period. Disturbances as a result of drilling were minimal and did not require specific stabilisation treatments with pasture regrowth / recovery sufficient (sees Plates 2 and 3). No further soil exposing activities occurred during the reporting period.

Whilst the site was not operational, Austral undertook site inspections following significant rainfall events. No erosion or sedimentation issues were noted, as part of the construction of the Quarry water management system a number of the existing farm dams will be upgraded for use as sediment basins which will include installation of stabilised spillways.

#### **Environmental Performance**

Water quality monitoring was carried out in accordance with the Water Management Plan at the eight site locations identified in Figure 6 and summarised below.

- WS2 represents the upstream Wingecarribee River monitoring location and WS8 represents the downstream location,
- WS1, WS5, WS6 and WS7 represent monitoring locations within ephemeral drainage lines within the Quarry Site which ultimately report to the Wingecarribee River. WS5 is also located on the confluence with drainage lines from the property west of the Quarry Site. As a result, future monitoring is proposed to be undertaken at monitoring location WS5b, which is located upstream of this confluence and will not be affected by water runoff from the adjacent property.
- WS4 is located within an ephemeral drainage line in the southern part of the Quarry Site which reports to Stony Creek.
- WS3 is located within Stony Creek upstream of any Quarry activities.

Monthly data has been consistently collected since May 2017 following a single round of monitoring in 2008. A summary of the monitoring data is provided in **Table 7** and key analytes are presented graphically in **Figure 9**. This data has been collected as baseline water quality data. Baseline data will continue to be collected until earthmoving and extractive activities commence in the next reporting period.

Table 7
Summary of Water Quality Testing – All Data (2017 – 2019)

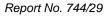
	WS1 V		W	S2	W	S3	WS4	W	S5	WS6	WS7	W	S8			
Parameter	Units	Min	Max	Min	Max	Min	Max	Min Max	Min	Max	Min Max	Min Max	Min	Max		
		Med	dian	Me	dian	Me	dian	Median	Me	dian	Median	Median	Me	dian		
рH		7.7	7.7	6.6	7.8	6.8	8.0		6.4	6.7			7.0	7.7		
		7.	.7	7.	.2	7	.2	] [	6	.6			7	.3		
EC	μS/cm	393	393	102	330	215	970		120	135			125	325		
		39	93	25	0.0	49	0.0				12	28			24	2.5
Sodium	mg/L	26.9	26.9	10.0	39.0	10.0	80.0		17.0	18.0			12.0	37.0		
		26	5.9	25	.0	28	3.0		17	7.5			23	3.0		
Potassium	mg/L	27.1	27.1	1.2	8.6	1.8	26.0	]	2.1	4.8			2.1	8.6		
		27	7.1	5	.8	6	.9		3	.5			5	.7		
Calcium	mg/L	13.6	13.6	3.6	19.0	24.0	92.0	]	3.9	4.6			5.0	22.0		
		13	3.6	15	.0	62	2.0		4	.3			15	5.0		
Magnesium	mg/L	7.9	7.9	2.3	11.0	5.7	28.0	]	2.3	2.8			2.7	9.4		
		7.	.9		.0		.5			.6				.0		
Chloride	mg/L	60	60	15	48	29	195	]	35 37				18	50		
			0		.0	51	L.0		3	36			33	3.5		
Sulfate	mg/L	2	2	2	82	3	285		0 0				4 81			
			2		.0	28	3.0	< LOR		OR				5.0		
Bicarbonate	mg/L	NT	NT	29	77	17	280	NS	12	21	NS	NS	30	79		
			Т	55			0.0	''	_	.7		113	54			
Phosphate	mg/L	NT	NT	0.1	0.3	0.1	1.3		0.1	0.1			0.3	0.3		
			Τ		.2	0.3				.1				.3		
Fluoride	mg/L	NT	NT	0.1	1.7	0.1	0.3		0.0	0.0			0.1	0.4		
			Т		.2	0.2				OR				.2		
Nitrate	mg/L	NT	NT	0.1	4.6	0.1	4.7		0.0	0.0	_		0.1	4.4		
		N			.6		.4			OR				.6		
Total Ammonia	mg/L	NT	NT	0.0	1.6	0.1	3.3	<u> </u>	0.3				0.1	0.2		
		N		_	.2	_	.3			.3				.1		
TKN	mg/L	7.3	7.3	0.2	3.8	0.4	17.0		1.5	1.7			0.1	2.4		
			.3		.3	1.8				.6			1.2			
Total Phosphorus	mg/L	0.2	0.2	0.0	0.5	0.0 1.6		ļ ļ	0.2	0.8			0.0	0.2		
			.2		.1	0.4				.5				.1		
TSS	mg/L	32	32	3	77	2 380		<u> </u>	61 290				4	250		
			2		.0		9.0			76				0		
Turbidity	NTU	NT	NT	5.3	75.0	0.6	180.0		80.0	180.0	4		3.5	70.0		
NC - No Cample			T Not To		3.0	10	0.0		13	0.0			12	2.0		

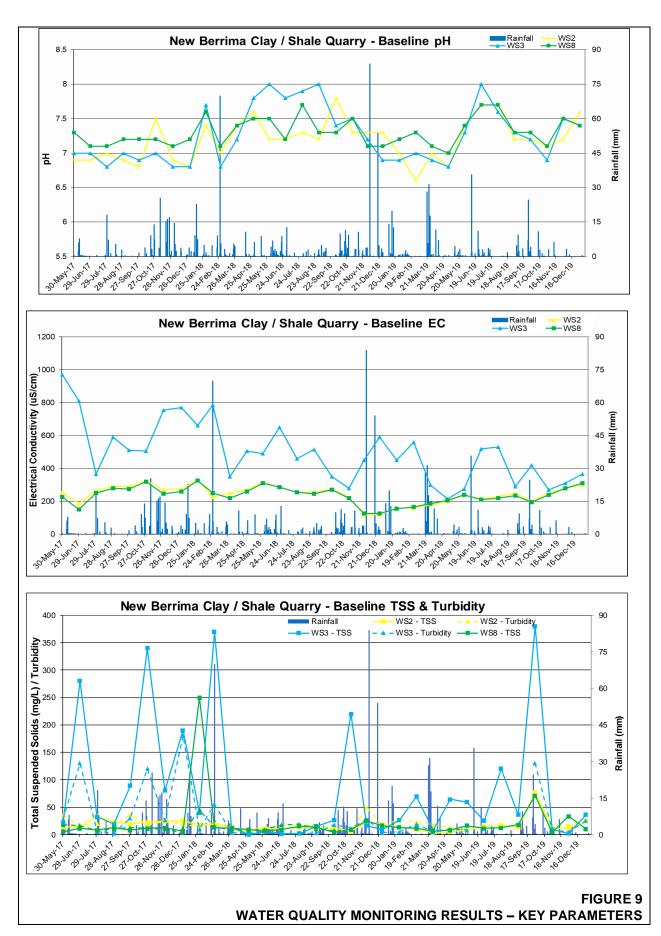
NS = No Sample

NT = Not Tested

General conclusions that can be drawn from the baseline water quality monitoring to date are as follows.

• Water has not been present at WS4, WS6 and WS7 during any monitoring events and has not been present at WS1 since the August 2008 sampling event. Water has also only been present at WS5 on two occasions. As these are ephemeral drainage lines located in well vegetated catchments, run off events will be limited to short periods following adequate rainfall.







- At WS2 (Wingecarribee River upstream) and WS8 (Wingecarribee River downstream), water has been present during all monitoring events. As would be expected, the results for most parameters are very similar between these locations with near neutral pH ranging from 6.6 to 7.8 and low electrical conductivities ranging from 102μS/cm to 330μS/cm. Whilst generally low, total suspended solids (TSS) and turbidity tends to be slightly higher at WS2 (upstream) ranging from 3mg/L to 77mg/L with a median of 14mg/L and 5.3NTU to 75NTU with a median of 18NTU respectively. At WS8 (downstream) TSS and turbidity has ranged from 4mg/L to 250mg/L with a median of 11mg/L and 3.5NTU to 70NTU with a median of 12NTU respectively.
- At WS3 (Stony Creek upstream), water has also been present during all monitoring events and, similar to Wingecarribee River, has near neutral pH ranging from 6.8 to 8.0. However, the electrical conductivity, TSS and turbidity are higher, ranging from 215μS/cm to 970μS/cm, 2mg/L to 380mg/L and 0.6NTU to 180NTU and is likely reflective of agricultural and industrial activities further upstream.
- At WS5, sufficient water was present in June and July 2017 to collect samples for analysis. The pH was also near neutral at 6.4 and 6.7 and electrical conductivity was low at 120μS/cm and 135μS/cm. Similar to WS3, TSS and turbidity were elevated, at 61mg/L and 290mg/L and 80NTU and 180NTU respectively. Future monitoring is proposed to be undertaken slightly upstream towards the Quarry to remove the influence of surrounding agricultural activities.

#### **Reportable Incidents and Further Improvements**

No reportable incidents or other issues arose during the reporting period.

No specific improvements are planned during the next reporting period other than the upgrade of the existing farm dams and construction of additional dams for use as sediment basins and clean water diversion in accordance with the Water Management Plan.

#### 7.3 GROUNDWATER

Groundwater is not expected to be encountered during operations. Notwithstanding, groundwater monitoring bores were installed (see **Figure 6**) during July 2019 to commence capture of baseline groundwater data. Notably, these piezometers were not required to be installed until extraction reached a depth of 660m AHD. Extraction operations have not yet commenced and the installation of the bores in 2019 will provide for several years of baseline data to be collected prior to extraction reaching 660m AHD.

The ongoing groundwater baseline monitoring program will be outlined within the updated Water Management Plan which is planned to be submitted during the first quarter of 2020.

There were no reportable incidents and no further improvements are currently planned.

#### 8. REHABILITATION

## 8.1 REHABILITATION PERFORMANCE DURING THE REPORTING PERIOD

**Figure 4** shows the status of the Quarry Site at the end of this reporting period whilst **Table 8** provides a summary of the disturbance and rehabilitation areas.

Table 8
Summary of Areas Disturbed and Rehabilitation

	Previous Reporting Period (Actual)	This Reporting Period (Actual)	Next Reporting Period (Forecast)
Quarry Area Type	Year 3 (ha)	Year 4 (ha)	Year 5 (ha)
Total Quarry footprint	2.0 <sup>1</sup>	2.0 <sup>1</sup>	9.3 <sup>2</sup>
Total active disturbance	2.0 <sup>1</sup>	2.0 <sup>1</sup>	9.3 <sup>2</sup>
Land being prepared for rehabilitation	0	0	0
Land under active rehabilitation	0	0	0
Completed rehabilitation	0	0	0

Notes:

Disturbance on site currently consists of the previously created preliminary topsoil stockpiles from soil removal from sections of the central visibility barrier and the office / car parking area. These have been stabilised utilising pasture species and are considered to be temporary rehabilitation. No specific rehabilitation works were required for the drill sites with all piezometers finalised with a steel monument to protect the standpipe (see **Plate 3**) and all quality control drill holes backfilled with some of the drill cuttings (see **Plate 2**). As no clearing or levelling was required and above ground sumps were utilised, ground-disturbance was minimal with pasture regrowth / recovery considered sufficient.

#### 8.2 ACTIONS FOR THE NEXT REPORTING PERIOD

Rehabilitation planned during the next reporting period will principally depend upon the progress of the visibility barrier construction. It is expected that the barrier construction will be completed during the next reporting period with soil stripped from the footprint of the barriers spread over the barriers and seeded with pasture species for stabilisation. The top and northern slopes of the central and northern barriers and the southern slope of the southern barrier will also be planted with tubestock to aid with the management of visual amenity. Given that the central and northern visibility barriers will be deconstructed, this revegetation will only be temporary.

Additionally, whilst not strictly a rehabilitation activity, planting of the vegetative screens adjacent the northern visibility barrier and around the Surplus Overburden Stockpile is also planned to take place (see **Figure 5**).

Seeds from the local and neighbouring Shale Woodland Community have been harvested by Wariapendi Native Nursery and are currently being propagated for use in the vegetative screens and rehabilitation of the visibility barriers.

<sup>1.</sup> Includes approximately 1.9ha of temporary rehabilitation.

<sup>2.</sup> Includes approximately 4.4ha of temporary rehabilitation (estimated).

#### 9. COMMUNITY

#### 9.1 COMMUNITY COMPLAINTS

No complaints were received during the reporting period and no complaints have been received in previous reporting periods.

#### 9.2 COMMUNITY LIAISON

With the exception of continued engagement with the Community Consultative Committee (CCC) and the committee meetings held, no specific community engagement activities or actions occurred during the reporting period.

Three meetings of the CCC were held in 2019, namely on 27 March, 21 August, and 20 November. A copy of the CCC meeting minutes are posted on Austral's website (http://australbricks.com.au/environmental-monitoring-data/) under "New Berrima (NSW)".

These meetings continue to provide the opportunity for the Company to provide updates to the CCC members and for the members to ask questions regarding the status of operations activities. The chairperson's annual report notes that these community members are motivated and seek relevant up-to date information from the Company.

However, it is noted that, whilst two community representatives attended each CCC meeting, the third member did not attend any meetings with the chairperson to write to the DPIE to remove this member from the CCC. Throughout the reporting period members of the CCC continued to seek additional community members to participate, however, participation has been declined / no response has been received to invitations.

A site inspection was undertaken following the 27 March 2019 meeting with no specific matters arising.

#### 10. INDEPENDENT AUDIT

The first independent environmental audit of the Quarry was undertaken in August 2017, in accordance with *Schedule 5 Condition 9* of PA 08\_0212. As a result, four recommendations were provided. A summary of the audit recommendations, proposed action/response and status update is presented in **Table 9**.

Table 9
Independent Audit Action Response Plan Status

Audit Recommendation	Action / Response	Status Update
It is recommended that the environmental management plans be reviewed and the management measures and monitoring programs revised in necessary to address	The six environmental management plans and Environmental Management Strategy (EMS) required by PA 08_0212 are to be reviewed in light of the:	Updated environmental management plans (excluding the Water Management Plan) were approved on 28 September 2018.
implementation matters and accommodate the delayed commencement of works on the Quarry site.	<ul><li>2017 Independent Environmental Audit;</li><li>2016 Annual Review and</li></ul>	Feedback from NRAR on the updated Water Management Plan has been received and their
	<ul> <li>associated DPE comments; and</li> <li>Modification 2 of PA 08_0212.</li> </ul>	agreement on groundwater monitoring bores was also received
It is recommended that the environmental monitoring programs be reviewed and time for commencement and the frequency of monitoring be revised if necessary to meet the delayed commencement of works on the Quarry site, resulting from the timeframe change resulting from the requirement for the bridge works over Stony Creek (Project Approval 08_0212 MOD 2).	Update relevant monitoring program components within the management plans.	on 27 May 2019. These bores were installed during the reporting period and the updated Water Management Plan is planned to be submitted to DPIE for approval during the first quarter of 2020.
Ensure dust deposition gauge bottle collection and analysis conforms with	Designation of alternative Austral personnel to complete collection and	Completed Primary collector – Compliance &
the monthly monitoring regime in the Air Quality Management Plan section	changeover of dust deposition gauge bottles.	Environmental Coordinator.
11.6 and AS 3580.10.1-2003.		Secondary collector – Raw Materials & Mining Manager.
	Include confirmation of dust bottle collection and receipt of results into monthly checklist.	Monthly checklist to be finalised prior to commencement of site establishment. Regular internal checks of sample collection continue
	Note: The monthly checklist will also include confirmation of all applicable monitoring as outlined within the updated Management Plans.	in the interim.
Progressive rehabilitation had not been implemented on the topsoil stockpiles in the area of the Central Visibility Barrier at the date of this audit and it is recommended that the implementation of Statement of Commitment occur to address the requirements of Project Approval	The soil stockpiles have naturally regenerated with no further action required however future soil stockpiles will be seeded as they are formed.	No further action currently required (no further soil stripping occurred during the reporting period). Soil stripping and stockpiling is planned during the next reporting period with seeding to be undertaken in accordance with the approved Water Management Plan.
08_0212 Schedule 3 condition 34 and 35.	Include requirement to seed long-term soil stockpiles in future contractual agreements with earthmoving contractor.	Not yet applicable – no soil stripping undertaken during the reporting period. This will be undertaken prior to commencement of further soil stripping activities.

The next Independent Environmental Audit is due to be undertaken by August 2020.



#### 11. INCIDENTS AND NON-COMPLIANCES DURING THE REPORTING PERIOD

During the reporting period there were no:

- reportable incidents or exceedances;
- official cautions, warning letters, penalty notices or prosecution proceedings; or
- non-compliances with PA 08\_0212 or M(MO)L6.

New Berrima Clay/Shale Quarry

#### 12. ACTIVITIES TO BE COMPLETED IN THE NEXT REPORTING PERIOD

Activities planned to be completed during the next reporting period are outlined in Section 4.3 and planned improvements in environmental management practices in Sections 6 and 7. In summary, the key activities planned for the next reporting period are as follows.

- Construction and upgrade of water management structures (dams and diversion drains) in accordance with the Water Management Plan.
- Construction of the northern, central and southern visibility barriers.
- Construction of the western access road.
- Temporary rehabilitation of the visibility barriers and completed stockpiles.
- Planting of the visual tree screens.
- Continued environmental monitoring.
- Continued community consultation, principally through the CCC.

No further updates to the management plans are currently expected to be required.

Investigation of automated monitoring and notification systems will also continue to be undertaken, including the possible use of water level sensors and telemetry services, to assist with environmental monitoring and management.

#### THE AUSTRAL BRICK COMPANY PTY LIMITED

New Berrima Clay/Shale Quarry

**2019 ANNUAL REVIEW** 

Report No. 744/29

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#### **Appendices**

(Total No. of pages including blank pages = 44)

Appendix 1 Compliance Review of Project Approval

 $08\_0212$  (32 pages)

Appendix 2 Compliance Review of M(MO)L6 (6 pages)

Appendix 3 Meteorological Data Recorded during 2019

(4 pages)

#### THE AUSTRAL BRICK COMPANY PTY LIMITED

New Berrima Clay/Shale Quarry

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#### **Appendix 1**

# Compliance Review of Project Approval 08\_0212

(Total No. of pages including blank pages = 32)

#### THE AUSTRAL BRICK COMPANY PTY LIMITED

New Berrima Clay/Shale Quarry

**2019 ANNUAL REVIEW** 

Report No. 744/29

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#### Table A1-1 Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

Page 1 of 29

NO.	Requirement	Compliance	Comment	Basis*
	LE 2: ADMINISTRATION CONDITIONS	•		
	ON TO MINIMISE HARM TO THE ENVIR	RONMENT		
2/1	In addition to meeting the specific performance criteria established under this approval, the Proponent must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the project.	Compliant	All reasonable and feasible measures to minimise potential for harm during the reporting period were implemented.	A, D
TERMS OF	F APPROVAL			
2/2	The Proponent must carry out the project generally in accordance with the:  a) EA;  b) EA (MOD 1); and c) EA (MOD 2).	Compliant	Activities during the reporting period are considered to be generally consistent these documents.	D, A
2/2A	The Proponent must carry out the project in accordance with the Project Plans, statement of commitments, and the conditions of this consent.  Notes:  a) The Project Plans are shown in Appendix A; and  b) The statement of commitments is reproduced in Appendix B.	Compliant	Activities during the reporting period are considered to be generally consistent these conditions and commitments.	D, A
2/3	If there is any inconsistency between the documents in condition 2, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.	Noted	-	-
2/4	The Proponent must comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of:  a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this approval; and  b) the implementation of any actions or measures contained in these documents.	Not Applicable	No specific requirements from the Secretary arose during the reporting period.	A
	assessment of compliance ntation Sighted A = Advised b	by Austral Employ	vee O = Observation	

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

for New Berrima Clay/Shale Quarry for the Reporting Period Page 2 of 29 Condition Compliance Comment Requirement Basis\* No. SCHEDULE 2: ADMINISTRATION CONDITIONS (Cont'd) **LIMITS ON APPROVAL Quarrying Operations** 2/5 Consent shall lapse 31 December Noted 2045. Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary or DRG. Consequently, this approval will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard. **Extractive Material Extraction** 2/6 The Proponent must not carry out any Not Yet Extraction operations yet to commence. D, A development in the extraction area Applicable below a level of 640m AHD. Note: This condition does not apply to the construction of any bores approved by DPI - Water or pollution and sediment control structures described in the EA or EA (MOD 1). 2/7 The Proponent must not extract more Not Yet Transportation operations yet to D. A Applicable than 150 000 tonnes of extractive commence. materials from the site in any calendar year. **Extractive Material Transport** 2/8 The Proponent must not transport more 150 000 tonnes of product from the Not Yet Transportation operations yet to D, A site in any calendar year; Applicable commence. 68 laden trucks from the site in a Not Yet D, A Transportation operations yet to day; and Applicable commence. 8 laden trucks from the site in an Not Yet Transportation operations yet to D, A Applicable commence. 2/9 The Proponent must only transport Not Yet Transportation operations yet to D, A extractive material on the haul route. Applicable commence. STRUCTURAL ADEQUACY 2/10 The Proponent must ensure that all Not Yet No buildings, structures, etc. which the D, A new buildings and structures, and any Applicable BCA applies have been constructed to alterations or additions to existing date. buildings and structures, are constructed in accordance with the relevant requirements of the BCA. \* = Basis for assessment of compliance

A = Advised by Austral Employee

O = Observation

D = Documentation Sighted

# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

Page 3 of 29

Condition			Pag	e 3 of 29
No.	Requirement	Compliance	Comment	Basis*
SCHEDUL	E 2: ADMINISTRATION CONDITIONS (	Cont'd)		•
STRUCTU	RAL ADEQUACY (Cont'd)			
	Notes:			
	Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.			
	Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.			
DEMOLITI	ON			
2/11	The Proponent must ensure that all demolition work on site is carried out in accordance with AS 2601-2001: The Demolition of Structures, or its latest version.	Not Applicable	No demolition undertaken during the reporting period.	D, A
PROTECT	ION OF PUBLIC INFRASTRUCTURE			
2/12	The Proponent must:  a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and	Not Applicable	No infrastructure required to be repaired or relocated.	D, A
	b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.			
OPERATION	ON OF PLANT AND EQUIPMENT			
2/13	The Proponent must ensure that all plant and equipment used at the site is:  a) maintained in a proper and efficient condition; and  b) operated in a proper and efficient manner.	Compliant	No earthmoving plant or equipment were utilised on site during the reporting period for activities approved by this approval. Drilling operations were undertaken under separate activity approval. Notwithstanding, all equipment utilised during drilling was appropriate maintained and operated.	A
STAGED S	SUBMISSION OF ANY STRATEGY, PLA	N OR PROGE	RAM	
2/14	With the approval of the Secretary, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.	Not Applicable	The Management Plans prepared relate to all stages of operations.	D
	Notes:			
	While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times; and			
	assessment of compliance			
D = Docume	ntation Sighted A = Advised b	by Austral Employ	vee O = Observation	

# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

Page 4 of 29

Condition No.	Requirement	Compliance	Comment	Basis*
	LE 2: ADMINISTRATION CONDITIONS (	Cont'd)		
	SUBMISSION OF ANY STRATEGY, PLA	-	RAM (Cont'd)	
2/14 (Cont'd)	If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.			
PRODUCT	TION DATA	T		
2/15	The Proponent must:  a) provide annual quarry production data to DRG using the standard form for that purpose; and	Not Yet Applicable	Extraction operations yet to commence.	D, A
	b) include a copy of this data in the Annual Review (see condition 4 of schedule 5).	Not Yet Applicable	Table 4 of this Annual Review summarises the production data – confirming there has been nil to date.	D
SCHEDUL	E 3: ENVIRONMENTAL PERFORMANC	E CONDITIO	NS	
IDENTIFIC	CATION OF BOUNDARIES			
3/1	Prior to carrying out any development on site under this approval, the Proponent must:  a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction; and	Compliant	Plans submitted on 18 March 2016.	D
	b) submit a survey plan of these boundaries to the Secretary.			
3/2	During the project, the Proponent must ensure that these boundaries are clearly marked at all times in a permanent manner that allows operating staff and inspecting officers to clearly identify the limits of extraction.	Compliant	All relevant boundaries are marked with posts at nominated locations. These markers were retained throughout the reporting period.	A, O
NOISE				
<b>Bund Con</b>	struction			
3/3	The Proponent must construct the Visibility Barriers prior to carrying out any quarrying operations on site under this approval to the satisfaction of the Secretary. This condition does not prohibit the winning of extractive material on site to be used in the construction of the Visibility Barriers.	Not Yet Applicable	Extraction operations (or construction of the Visibility Barriers) have not yet commenced.	D, A, O
	Note: Visibility Barriers are shown on the project layout plans in Figure 1 of APPENDIX A.			
	assessment of compliance ntation Sighted A = Advised b	oy Austral Employ	yee O = Observation	



# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

Page 5 of 29

Condition No.	Requirement		Complian	ce Commer	nt		Basis*		
SCHEDUL	E 3: ENVIRONMENTAL PERF	ORMANO	E CONDIT	IONS (Cont'	d)				
NOISE (Co	ont'd)								
Visibility E	Barrier and Stockpile Dimensi	ions							
3/3A	The Visibility Barriers and surp overburden stockpile (refer Fig Appendix A) must be construct meet the dimensions specified Table 1A, unless the Secretary otherwise.	gure 1 ted to l in y agrees	Not Yet Applicabl	e commend	ced.	iers has not yet	D, A		
	Table 1A: Visibility Barriers an	d Surplus	Overburde	n Stockpile D	imensions				
	Structure	Heig	ght	Base Width	Length (m)	Surface Area			
	Central Barrier (minimum) Northern Barrier (minimum) Southern Barrier (minimum)	675 (m 672 (m 4 metres a natural lan	AHD) above the d surface	(m) 30 - 45 35 - 50 20	420 160 350	(ha) 1.5 0.7 0.7			
	Overburden Stockpile (maximum)	683 (m	AHD)	-	-	-			
Noice Crit	eria – Bund Construction		<u> </u>		!				
3/4	During the construction of the Barriers, the Proponent must ethat the noise generated on sit not exceed the criteria in Table	ensure te does e 1.	Not Yet Applicabl			iers has not yet	D, A		
	Table 1 – Noise Criteria – Bund Construction								
	Receiver	Lang (15 min	odB(A)						
	R2 All other receivers	38							
	Notes:  Receiver locations are sho  Noise generated by the pre exemptions (including cert	oject is to	be measure	ed in accorda			s and		
Noise Crit	eria								
3/5	Except for the period when the Visibility Barriers are being constructed, the Proponent must ensure that the noise generated by the project does not exceed 38dB(a) LAeq (15min) at any residence on privately-owned land.		Not Yet Applicabl	e operation			D, A		
	However, this criterion does not the Proponent has a written agwith the relevant landowner to the criteria, and the Proponent advised the Department in writthe terms of this agreement.	greement exceed has							
* = Basis for	assessment of compliance			•					
D = Docume	ntation Sighted A	= Advised b	by Austral Em	ployee	O = Obse	ervation			

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the 2017 Reporting Period

Condition No.	Requirement		Compliance	Comr	nent	Basis*
SCHEDUL	E 3: ENVIRONMENTAL PE	RFORMANO	E CONDITIO	NS (Co	ont'd)	
NOISE (Co	ont'd)					
Hours of (	Operations					
3/6	The Proponent must comploperating hours in Table 2.  Table 2 – Operating Hours		Compliant	the ap	ctivities were undertaken outside opproved hours of operation ding drilling operations completed r separate activity approval).	f A
	Day	Transport	Quarrying Oper	ations	Construction	
	Monday – Friday	7 am to 4 pm	7 am to 5 pm		7 am – 5 pm	
	Saturday	8 am to 1 pm	8 am to 1 pm		8 am – 1 pm	
	Sundays and Public Holidays	None	None		None	
	Note: Maintenance activitie owned residences.	es may occur	at any time pro	ovided	they are inaudible at privately-	
Operating	Conditions					
3/7	The Proponent must:					
311	implement best practice management to minimis construction, operations frequency and traffic no project;	Compliant	were and e requir noise (comp appro	ties during the reporting period limited to monitoring, inspections crosion and sediment control which red limited traffic and no specific controls. Drilling operations pleted under a separate activity eval) also implemented best ice noise management measures.	A	
	b) minimise the noise impacts of the project during meteorological conditions when the noise limits in this approval do not apply;		Not Yet Applicable		cable conditions have not yet red during periods of site activity.	A
	c) maintain the effectiveness of any noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired; and		Not Yet Applicable	As ab	oove.	A
	d) regularly assess noise in data and relocate, modi stop operations on site compliance with the relocations of this approximation.	ify, and/or to ensure evant val,	Not Yet Applicable	No da	ata yet assembled.	A
	to the satisfaction of the Se	ecretary.				
	nagement Plan		1	I		<del>-</del>
3/8	The Proponent must prepa Management Plan for the p satisfaction of the Secretar must:  a) be prepared in consults	oroject to the y. This plan	Compliant	on 18 13 Ma	Plan was submitted to the Secretal March 2016 and approved on ay 2016. The Plan was updated approved 28 September 2018.	y D
	the EPA, and submitte Secretary for approval construction of the Visi Barriers;	d to the prior to the				
* = Basis for	assessment of compliance					
D = Docume	ntation Sighted	A = Advised I	oy Austral Employ	/ee	O = Observation	



# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Requirement	C	ompliance	Comment	Basis*
SCHEDUL	.E 3: ENVIRONMENTAL PI	ERFORMANCE	CONDITION	NS (Cont'd)	
NOISE (Co	ont'd)				
Noise Mar	nagement Plan (Cont'd)				
3/8 (Cont'd)	b) describe the measures be implemented to en				
	best management prac employed on site;	ctice is being			
	the noise impacts of th minimised during mete conditions when the no this approval do not ap	orological bise limits in			
	compliance with the re conditions of this appro-				
	c) describe the proposed management system i				
	d) include a monitoring p	rogram that:			
	is capable of evaluating performance of the pro				
	includes a protocol for exceedances of the rel conditions in this appro-	evant			
	evaluates and reports effectiveness of the no management system of the system of	ise			
	The Proponent must imple approved management pla approved from time to time Secretary.	n as			
AIR QUAL	ITY				l
Air Quality	y Criteria				
3/9	The Proponent must ensure reasonable and feasible as mitigation measures are enthat particulate matter emitgenerated on site do not e criteria in Table 3, Table 4 at any residence on private land, or on more than 25% privately-owned land.	voidance and mployed so ssions xceed the and Table 5 ely-owned	Not Yet Applicable	Barrier construction and extraction activities have not yet commenced. Notwithstanding, deposited dust monitoring to date indicates compliance with the applicable criteria.	D, A
	Table 3 – Long-Term Impa	act Assessment (	Criteria for F	Particulate Matter	
	Pollutant	Averaging period	<sup>d</sup> Criterion		
	Total suspended particulates (TSP)	Annual	<sup>а</sup> 90 µg/m <sup>3</sup>		
	Particulate matter < 10 μm (PM <sub>10</sub> )	Annual	a 30 μg/m <sup>3</sup>		
	Table 4 – Short Term Impa	act Assessment	Criteria for F	Particulate Matter	
	Pollutant	Averaging period	<sup>d</sup> Criterion		
	Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	a 50 µg/m <sup>3</sup>		

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

Condition No.	Requirement	t		Comp	liance	Commen	t	Bas	sis'
SCHEDUL	E 3: ENVIRO	NMENTAL PE	RFORMANC	CE CON	IDITIO	NS (Cont'o	d)		
AIR QUAL	ITY (Cont'd)								
Air Quality	y Criteria (Co	nt'd)							
3/9	Table 5 – Lo	ng-Term Impa	ct Assessmei	nt Crite	ria for E	Deposited L	Dust		
(Cont'd)	Pollutant	Averaging period	Maximum increas deposited dust le		Maximum deposited	total dust level			
	<sup>c</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month		4 g/m²/m	onth			
	Notes to Tab	les:							
		npact (ie incre ations due to a			oncentr	ations due	to the project plus backgro	und	
	<ul> <li>b Increme own);</li> </ul>	ental impact (i	e incrementai	l increa	se in co	oncentratio	ns due to the project on its		
	AS/NZS	3580.10.1:200	3: Methods fo	or Sam	oling an	nd Analysis	iined by Standards Australia s of Ambient Air – vimetric Method.	,	
	fog, fire ii						ed burning, dust storms, sea If by the Secretary in		
	e "Reasonable and feasible avoidance measures" includes, but is not limited to, the operational requirements in conditions 10, 11 and 12 to develop and implement an air quality management system that ensures operational responses to the risks of exceedance of the criteria.								
Operating	Conditions								
3/10	The Propone	nt must:							
	practice	nt best manag to minimise th is of the projec	e dust	1	ot cable	PA 08_02 managem reporting (complete approval)	ies approved under 212 requiring specific dust nent occurred during the period. Drilling operations and under a separate activity also implemented best dust management measures		A
	monitorir modify, a site to er	assess air quing data and re and/or stop opensure compliar conditions of t	locate, erations on nce with the	Com	pliant		d dust monitoring data compinated criteria	olies [	D
	the proje meteorol extraordi	the air quality oct during adve logical condition inary events (sable 5 above);	erse ons and	Not Appli	Yet cable		se conditions have yet during periods of activity.	4	Α
		d) minimise any visible off-site air pollution; and		Com	pliant		during the reporting period rate visible dust.	did A	A
	of the sit project.	the surface d e generated b		Com	pliant		nces to date have been limite ned to the approved ce areas.	ed A	A
	project. assessment of contaction Sighted	ompliance	A = Advised b	by Auetra	l Employ		Ce areas.  O = Observation		

# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Red	quirement	Compliance	Comment	Basis*					
SCHEDUL	E 3:	ENVIRONMENTAL PERFORMANC	E CONDITIO	NS (Cont'd)						
AIR QUAL	AIR QUALITY (Cont'd)									
		nnagement Plan			1					
3/11	Qua pro	e Proponent must prepare an Air ality Management Plan for the ject to the satisfaction of the cretary. This plan must:	Compliant	The Plan was submitted to the Secretary on 18 March 2016 and approved on 13 May 2016. The Plan was updated and approved 28 September 2018.	D					
	a)	be prepared in consultation with the EPA, and submitted to the Secretary for approval prior to the construction of the Visibility Barriers		During the reporting period deposited dust monitoring has been undertaken in accordance with the plan. As no construction or operational activities occurred, no specific management						
	b)	describes the measures that would be implemented to ensure:		measures were required during the reporting period.						
	•	best management practice is employed;								
	•	the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events; and								
	•	compliance with the relevant conditions of this approval;								
	c)	describes the proposed air quality management system; and								
	d)	includes an air quality monitoring program that:								
	•	is capable of evaluating the performance of the project;								
	•	includes a protocol for determining any exceedances of the relevant conditions of approval;								
	•	adequately supports the air quality management system; and								
	•	evaluates and reports of the adequacy of the air quality management system.								
	app app Sec	e Proponent must implement the proved management plan as proved from time to time by the cretary.								
METEORC	LO	GICAL MONITORING			1					
3/12	Pro suit vici req Me Air gui	ring the life of the project, the oponent must ensure that there is a table meteorological station in the inity of the site that complies with the uirements in the "Approved thods for Sampling and Analysis of Pollutants in New South Wales" deline.	Compliant	A station was established on site on 19 September 2016 and remains operational.	D, O					
* = Basis for	asse	ssment of compliance								
D = Documer	ntatio	on Sighted A = Advised I	by Austral Employ	vee O = Observation						

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Requirement	Compliance		10 of 29 Basis*
SCHEDUL	E 3: ENVIRONMENTAL PERFORMANC	E CONDITIO	NS (Cont'd)	
SOIL AND	WATER			
	Note: The Proponent is required to obtain the necessary water licences for the project under the Water Act 1912 and/or Water Management Act 2000.	Not Yet Applicable	No water licences currently required.	D
Riparian E	Buffer Distance			
3/13	The Proponent must maintain a minimum buffer distance of 515 metres (measured from the top of bank) between extraction area and Wingecarribee River.	Compliant	No extraction activities occurred within the nominated buffer during the reporting period.	D, A
Surface W	later Discharging			
3/14	The Proponent must ensure that all surface water discharges from the site comply with section 120 of the POEO Act or, if an EPL has been issued regulating water discharges from the site, the discharge limits (both volume and quality) set for the project in the EPL.	Not Yet Applicable	As operational activities have not commenced there have been no 'discharges'.	A
Surface W	later Supply			
3/15	The Proponent must ensure it has sufficient water for all stages of the project, and if necessary, adjust the scale of quarrying operations on site to match its available supply.	Not Yet Applicable	Barrier construction and extraction operations yet to commence. Existing farm dams on-site will provide initial water supply.	D, A
On-Site So	ewerage Management			
3/16	The Proponent must manage on-site sewage to the satisfaction of Council and EPA.	Not Yet Applicable	Toilet facilities/amenities not yet established on site.	A
Storage of	f Chemicals & Petroleum Products			
3/17	The Proponent must ensure all chemicals and/or petroleum products on site are stored in accordance with Australian Standard AS1940-2004, The Storage and Handling of Flammable and Combustible Liquids, and in appropriately bunded areas with impervious flooring and of sufficient capacity to contain 110% of the largest container stored within the bund. The flooring and bund(s) must be designed in accordance with:  • the requirements of relevant Australian Standards; and  • DECC's Storing and Handling Liquids: Environmental Protection — Participants Manual	Not Yet Applicable	No chemicals or petroleum products were stored on site during the reporting period	A
	Participants Manual.			
	assessment of compliance			
סכume = ח	entation Sighted A = Advised b	by Austral Employ	yee O = Observation	



# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Re	quirement	Compliance	Comment	Basis'				
SCHEDUL	E 3	: ENVIRONMENTAL PERFORMANC	E CONDITION	NS (Cont'd)					
	SOIL AND WATER (Cont'd)								
		ement Plan							
3/18	Ma sa mu the by pe ap su pri Ba In rea (se	re Proponent must prepare a Water canagement Plan for the project to the tisfaction of the Secretary. This plan ust be prepared in consultation with the EPA, WaterNSW and DPI – Water suitably qualified and experienced rsons whose appointment has been proved by the Secretary, and be bounded to the Secretary for approval or to the construction the Visibility waters on site.  addition to the standard quirements for management plans the condition 3 of schedule 5), this can must include a:	Compliant	The Plan was submitted to the Secretary on 18 March 2016 and approved on 9 June 2016. The Plan was updated during 2018 and NRAR feedback received during the reporting period. A further updated plan is planned to be submitted for approval during first quarter 2020.  During the reporting period water monitoring has been undertaken in accordance with the existing approved plan. Whilst the water management system has not yet been constructed, erosion & sedimentation inspections were undertaken by the Company.	D				
	a)	Site Water Balance that:							
	•	includes details of:							
		<ul> <li>sources and security of water supply, including contingency planning for future reporting periods;</li> </ul>							
		<ul><li>water use on site;</li></ul>							
		<ul><li>water management on site;</li></ul>							
		<ul> <li>reporting procedures, including comparisons of the site water balance each calendar year; and</li> </ul>							
	•	describes the measures that would be implemented to minimise clean water use on site;							
	b)	Surface Water Management Plan, that includes:							
	•	detailed baseline data on surface water flows and quality in the water-bodies that could be affected by the project;							
	•	a detailed description of the surface water management system on site, including the:							
		<ul> <li>clean water diversion systems;</li> </ul>							
		<ul> <li>erosion and sediment controls; and</li> </ul>							
		<ul><li>water storages.</li></ul>							
	•	a plan for identifying, extracting, handling, and the long-term storage of potentially acid forming material on site;							
* = Basis for a		essment of compliance on Sighted A = Advised I	by Austral Employ	vee O = Observation					

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Requirement	Compliance	Comment	Basis*
SCHEDUL	E 3: ENVIRONMENTAL PERFORMANO	E CONDITION	NS (Cont'd)	
SOIL AND	WATER (Cont'd)			
Water Mar	nagement Plan (Cont'd)			
3/18 (Cont'd)	<ul> <li>detailed plans, including design objectives and performance criteria, for:</li> </ul>			
	<ul> <li>the water storage dams; and</li> </ul>			
	<ul> <li>reinstatement of drainage lines on the rehabilitated areas of the site;</li> </ul>			
	<ul> <li>control of water pollution from rehabilitated areas of the site;</li> </ul>			
	<ul> <li>performance criteria for surface water quality attributes relevant to water quality impacts on biological diversity and aquatic ecological integrity, including salinity, heavy metals, sediment load, pH, hardness and biological oxygen demand;</li> </ul>			
	a program to monitor:			
	<ul> <li>the effectiveness of the water management system;</li> </ul>			
	<ul> <li>surface water flows and quality in local water ways; and</li> </ul>			
	<ul> <li>ecosystem health of local water ways;</li> </ul>			
	<ul> <li>a plan to respond to any exceedances of the performance criteria, and mitigate and/or offset any adverse surface water impacts of the project; and</li> </ul>			
	<ul><li>c) Groundwater Management Plan, which includes:</li></ul>			
	<ul> <li>detailed baseline data on groundwater levels, yield and quality in the area, that could be affected by the project;</li> </ul>			
	<ul> <li>groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts;</li> </ul>			
	a program to monitor:			
	<ul> <li>groundwater inflows to the quarrying operations;</li> </ul>			
	<ul><li>the impacts of the project on:</li></ul>			
	<ul> <li>local alluvial aquifers;</li> <li>any groundwater bores on privately-owned land that could be affected by the project;</li> </ul>			
* = Basis for	assessment of compliance	1		

A = Advised by Austral Employee



D = Documentation Sighted

O = Observation

# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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0			raye	13 of 29			
Condition No.	Requirement	Compliance	Comment	Basis*			
SCHEDUL	E 3: ENVIRONMENTAL PERFORMANC	E CONDITIO	NS (Cont'd)				
SOIL AND WATER (Cont'd)							
Water Mar	nagement Plan (Cont'd)						
3/18 (Cont'd)	<ul> <li>the seepage/leachate from water storages or backfilled voids on site; and</li> </ul>						
	<ul> <li>groundwater dependent ecosystems;</li> </ul>						
	<ul> <li>a plan to respond to any exceedances of the groundwater assessment criteria;</li> </ul>						
	The Proponent must implement the approved management plan as approved from time to time by the Secretary.						
Groundwa	ter Monitoring						
3/18A	The Proponent must install 3 pairs of nested piezometers prior to the quarry pit floor reaching 660m AHD, in consultation with DPI – Water and to the satisfaction of the Secretary.	Compliant	Whilst extraction operations have not yet commenced (and therefore the 660m AHD level has not yet been reached), acceptance of the monitoring approach was received from NRAR on 27 May 2019 and the piezometers installed during July 2019.	D			
VISUAL							
Establishr	nent of Effective Vegetative Screens						
3/19	The Proponent must vegetate (with grasses, shrubs and trees) the Visibility Barriers as soon as practicable after the completion of the construction of the bunds, to the satisfaction of the Secretary.	Not Yet Applicable	Barriers not yet constructed.	D, A			
3/19A	Prior to transporting any product from the site, the Proponent must establish a 0.68 ha tree screen adjacent to the Northern Visibility Barrier, as shown on Figure 1 in Appendix A. The screen must include native plant species from the Southern Highlands Shale Woodland Endangered Ecological Community.	Not Yet Applicable	No product transportation has occurred to date.	A			
Advertisin	ig						
3/20	The Proponent must not erect or display any advertising structure(s) or signs on the site without the written approval of the Secretary.	Not Yet Applicable	No advertising structures are required or have been erected for the quarry.	D, A			
	Note: This condition does not require approval for any business identification, traffic management, and/or safety or environmental signs.						
	assessment of compliance						
D = Docume	ntation Sighted A = Advised b	y Austral Employ	yee O = Observation				

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition	Requirement	Compliance		14 of 29 Basis*
				Dasis
VISUAL (C	.E 3: ENVIRONMENTAL PERFORMANO	E CONDITIO	NS (Cont a)	
· · · · · · · · · · · · · · · · · · ·	Conditions			
3/21	The Proponent must:			
	a) implement all reasonable and feasible measures to minimise the visual impacts and any off-site lighting impacts of the project; and	Not Yet Applicable	No lighting was required to be used onsite during the reporting period.	А
	b) maintain and improve the effectiveness of the bunds and vegetative screens over the life of the project.	Not Yet Applicable	Barriers not yet constructed	D, A
3/22	Deleted			
TRANSPO	PRT			
Road Upg	rades (Local Roads)			
3/23	Prior to transporting any extractive material from the site, the Proponent must:	Not Yet Applicable	No product transportation has occurred to date.	A
	a) construct the junction of the site access road with Berrima Road to Basic Right Turn and Basic Left Turn Treatment standard for a 19m semi-trailer;	Not Yet Applicable	Construction has not yet commenced.	A
	b) construct a raised concrete median in Berrima Road on the south bound approach to its junction with MR372;	Not Yet Applicable	Construction has not yet commenced.	A
	c) provide appropriate traffic signage and line-marking,	Not Yet Applicable	Construction has not yet commenced.	А
	in accordance with AUSTROADS Guide to Road Design and to the satisfaction of the Council.			
	rades (Main Roads)			
3/24	Prior to transporting any extractive material from the site, the Proponent must:	Note Yet Applicable	No product transportation has occurred to date.	A
	construct the Berrima Road/Taylor     Avenue junction to give priority to     MR372 incorporating Rural BA Left     and Right turn treatments for a     19m semi-trailer;			
	b) provide appropriate traffic signage and line-marking,			
	in accordance with AUSTROADS Guide to Road Design and to the satisfaction of the Council and the RMS.			
* = Basis for	assessment of compliance			
D = Docume	ntation Sighted A = Advised I	by Austral Employ	yee O = Observation	



# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition				15 of 29
No.	Requirement	Compliance	Comment	Basis*
SCHEDUL	E 3: ENVIRONMENTAL PERFORMANC	E CONDITION	NS (Cont'd)	
TRANSPO	ORT (Cont'd)			
Road Upg	rades (Main Roads) (Cont'd)	1		1
3/24 (Cont'd)	If the Council undertakes or proposes to undertake a superior treatment of this intersection upgrade, then this condition may be fulfilled by the Proponent paying a monetary contribution to the Council equivalent to the cost of the upgrades specified under this condition, as assessed by a qualified independent valuer or quantity surveyor appointed by the Secretary. The costs of the valuation are to be paid by the Proponent.  Any dispute over the interpretation of			
	this condition or a satisfactory valuation can be referred by any party to the Secretary for resolution. The decision of the Secretary in any such dispute shall be final.			
Transport	Route	T		
3/25	The Proponent must ensure heavy vehicles associated with the Project travel along haulage routes specified in the EA and the haulage route diagram in Figure 3 of APPENDIX A to this approval to the satisfaction of the Secretary.	Not Yet Applicable	Despatch of clay/shale has not yet commenced.	A
Road Mair	ntenance Contribution			
3/26	The Proponent must pay to Council an annual contribution of 91.2 cents per cubic metre of extractive material exported from the site (indexed annually to Consumer Price Index) for the life of the Project. The volume of extractive material exported from the site must be established by way of a volumetric survey of the site carried out by a registered surveyor. Each annual volumetric survey must be provided to Council to allow verification of the contribution amount. The first annual payment falls due 12 months from the commencement of operations.  Note: The Proponent must provide a base-line survey of the site to the Council prior to the commencement of operations.	Not Yet Applicable	Despatch of clay/shale has not yet commenced.	A
* = Basis for	assessment of compliance			
D = Docume	entation Sighted A = Advised b	y Austral Employ	vee O = Observation	

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Red	quirement	Compliance		16 of 29 Basis*
		: ENVIRONMENTAL PERFORMAN			
TRANSPO			<u> </u>		
Parking		(			
3/27	par	e Proponent must provide sufficient king for all project-related traffic, in cordance with Council's parking de.	Not Yet Applicable	Operations have not yet commenced, however, dedicated parking areas are planned on site.	A
Operating	Co	nditions			
3/28	The	e Proponent must ensure that:			
	a)	vehicles on site do not exceed a speed limit of 30 kilometres per hour;	Compliant	Company policy nominates a speed limit of 30kph on site.	A
	b)	all loaded vehicles entering or leaving the site have their loads covered; and	Not Yet Applicable	Despatch of clay/shale has not yet commenced.	A
	c)	all loaded vehicles leaving the site are cleaned of sand and other materials before they leave the site so they do not track dirt onto the public roads.	Not Yet Applicable	Despatch of clay/shale has not yet commenced.	A
Transport	Mai	nagement Plan			
3/29	Tra	be submitted prepared in consultation with the RMS and	Compliant	The Plan was submitted to the Secretary on 18 March 2016 and approved on 13 May 2016. The Plan was updated and approved 28 September 2018.  Transport operations have not yet commenced.	D, A
		Council, and submitted to the Secretary for approval prior to carrying out any quarrying operations on site;			
	b)	include a drivers' code of conduct for the project;			
	c)	describe the measures that would be implemented to ensure:			
	•	establishing a CB radio communication protocol with the local bus companies, to improve driver awareness of quarry truck and school bus locations along haulage routes;			
	•	the drivers of project-related vehicles comply with the drivers' code of conduct for the project; and			
	•	compliance with the relevant conditions of this approval; and			
	d)	include a program to monitor the effectiveness of the implementation of these measures.			
* = Basis for D = Docume		ssment of compliance on Sighted $A = Advised$	by Austral Emplo	yee O = Observation	



#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

Condition No.	Red	quirement	Compliance	Comment	Basis*
		ENVIRONMENTAL PERFORMANC	E CONDITION	NS (Cont'd)	
TRANSPO	RT	(Cont'd)			
Transport	Mar	nagement Plan (Cont'd)			
3/29 (Cont'd)	app app	e Proponent must implement the proved management plan as proved from time to time by the cretary.			
3/30	(TM red Roa Zor fror (TC	buld the Traffic Management Plan MP) for the proposed works require a uction of the speed limit on Berrima and and/or Taylor Avenue, a Speed the Authorisation must be obtained in RMS Traffic Operations Unit DU) prior to commencing work within road reserve.	Not Yet Applicable	Authorisation not currently required.	A
WASTE					
3/31	The	e Proponent must:			
	a)	monitor the amount of waste generated by the project;	Compliant	Information on waste volume provided in Section 6.5 of this document.	D
	b)	investigate ways to minimise waste generated by the project;	Compliant	All contractors are required to remove their own waste from site.	Α
	c)	implement reasonable and feasible measures to minimise waste generated by the project;	Compliant	All contractors are required to remove their own waste from site.	A
	d)	ensure that all waste generated by the project is lawfully disposed of to an appropriate facility; and	Compliant	All contractors are required to dispose of all wastes lawfully.	А
	e)	report on waste management and minimisation in the annual review,	Compliant	See Section 6.5 of this document.	D
	to t	he satisfaction of the Secretary.			
ABORIGIN	AL	HERITAGE			
Aborigina	Не	ritage Management Plan			
3/32	Abo for	e Proponent must prepare an original Heritage Management Plan the project to the satisfaction of the cretary. This plan must:  be prepared in consultation with	Compliant	The Plan was submitted to the Secretary on 18 March 2016 and approved on 13 May 2016. The Plan was updated and approved 28 September 2018. A further administrative update was	D
	,	OEH and the relevant Local Aboriginal Land Council;		approved 9 November 2018.  Activities during the reportion period	
	b)	be submitted to the Secretary for approval prior to any ground disturbance; and		were compliant with the Plan.	
	c)	include a:			
	•	protocol for the engagement of an Aboriginal Site Officer for any necessary ground disturbance monitoring;			
* = Basis for D = Document		ssment of compliance in Sighted A = Advised b	by Austral Employ	vee O = Observation	



# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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O = m =!!!! =			l age	18 of 29				
Condition No.	Requirement	Compliance	Comment	Basis*				
SCHEDUL	E 3: ENVIRONMENTAL PERFORMANC	E CONDITIO	NS (Cont'd)					
ABORIGIN	ABORIGINAL HERITAGE (Cont'd)							
Aborigina	Heritage Management Plan (Cont'd)							
3/32 (Cont'd)	<ul> <li>program for the recording, notifying, salvage and surface collection of any Aboriginal objects/sites that may be encountered within the project area;</li> </ul>							
	description of the measures that would be implemented if any Aboriginal skeletal remains are discovered during the project; and							
	<ul> <li>protocol for the ongoing consultation and involvement of the Aboriginal community in the conservation and management of the Aboriginal heritage of the objects/sites.</li> </ul>							
	The Proponent must implement the approved management plan as approved from time to time by the Secretary.							
3/32A	If any item or object of potential Aboriginal heritage significance is identified during works associated with the project, the Proponent must ensure that:	Not Applicable	No Aboriginal heritage objects or objects suspected of being of Aboriginal origin were located during the reporting period.	D, A				
	all work in the immediate vicinity of the potential Aboriginal item or object ceases immediately;							
	<ul> <li>a 10m buffer area around the potential item or object is cordoned off; and</li> </ul>							
	c) the OEH is contacted immediately.							
	Work in the immediate vicinity of the Aboriginal item or object may only recommence in accordance with the provisions of Part 6 of the <i>National Parks and Wildlife Act 1974</i> .							
LANDSCA	PE							
Rehabilita	tion Objectives	_		,				
3/33	The Proponent must rehabilitate the site to the satisfaction of the DRG. This rehabilitation must be consistent with the proposed rehabilitation strategy in the EA (MOD 1), and comply with the objectives in Table 6.	Not Yet Applicable	No areas of final rehabilitation have yet become available.	D, A				
	assessment of compliance							
D = Docume	ntation Sighted A = Advised b	by Austral Employ	vee O = Observation					

# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Requirement		Compliance	Comment	Basis*	
SCHEDUL	E 3: ENVIRONMENTA	L PERFORMANC	E CONDITIO	NS (Cont'd)		
LANDSCA	PE (Cont'd)					
Rehabilita	tion Objectives (Cont'	d)				
3/33	Table 6 – Rehabilitatio	n Objectives				
(Cont'd)	Feature Objective Site (as a whole) Safe, stable & non-polluting Surface Infrastructure To be decommissioned and removed, unless the DRG agrees otherwise					
	Quarry Walls	Final slopes of 1:3 (v wall of Bench 1	e endemic flora sp	ecies to be consistent with		
	Quarry Pit Floor Other Land affected by the project	self-sustaining eco-sy  local native	unction, including ystems comprised species: and	maintaining or establishing		
Progressiv	ve Rehabilitation					
3/34	The Proponent must re site progressively, that reasonably practicable disturbance. All reasor feasible measures mus minimise the total area dust generation at any rehabilitation strategies employed when areas generation cannot yet rehabilitated.	is, as soon as following hable and st be taken to exposed for time. Interim s must be prone to dust	Compliant	The previously created soil stockpiles were adequately grassed with supplementary hydromulching undertaken in February 2018. Whilst dweather has impacted all groundcover across the site, monitoring indicates digeneration has not been adverse.		
Landscap	e Management Plan					
3/35	The Proponent must p Landscape Manageme project to the satisfacti Secretary. This plan m	ent Plan for the on of the	Compliant	The Plan was submitted to the Secreta on 18 March 2016 and approved on 13 May 2016. The Plan was updated and approved 28 September 2018.	iry D	
	a) be prepared in cor OEH and Council, to the Secretary fo to carrying out any site under this app	and submitted or approval prior or development on proval;		No areas of final rehabilitation have become available. However, temporar rehabilitation is generally in accordance with the plan.		
	b) describe the short, long term measure implemented to:					
	manage the remna and habitat on site;					
	<ul> <li>rehabilitate the ripa adjacent to the Wir River on site; and</li> </ul>					
	<ul> <li>ensure compliance rehabilitation object progressive rehability obligations in this a</li> </ul>	tives and litation				
	assessment of compliance ntation Sighted	A = Advised b	oy Austral Employ	vee O = Observation		

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

Page 20 of 29 Condition Requirement Basis\* Compliance Comment No. SCHEDULE 3: ENVIRONMENTAL PERFORMANCE CONDITIONS (Cont'd) LANDSCAPE (Cont'd) Landscape Management Plan (Cont'd) 3/35 include detailed performance and (Cont'd) completion criteria for evaluating the performance of the rehabilitation of the site, including triggering remedial action (if necessary); d) include a detailed description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for: ensuring compliance with the rehabilitation objectives and progressive rehabilitation obligations in this approval; enhancing the quality of existing vegetation and fauna habitat; restoring native endemic vegetation and fauna habitat within the biodiversity areas and rehabilitation area; maximising the salvage of resources within the approved disturbance area - including vegetative and soil resources - for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area; collecting and propagating seed; minimising the impacts on fauna on site, including undertaking preclearance surveys; controlling weeds and feral pests; controlling erosion; managing grazing and agriculture on site; controlling access; and bushfire management; a program to monitor the effectiveness of these measures,

criteria:

and progress against the performance and completion

D = Documentation Sighted A = Advised by Austral Employee O = Observation



<sup>\* =</sup> Basis for assessment of compliance

# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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	т	T	Page	21 of 29
Condition No.	Requirement	Compliance	Comment	Basis*
SCHEDUL	E 3: ENVIRONMENTAL PERFORMANC	E CONDITION	NS (Cont'd)	
LANDSCA	APE (Cont'd)			
Landscap	e Management Plan (Cont'd)			
3/35 (Cont'd)	f) identify the potential risks to successful implementation of the rehabilitation of the site, and include a description of the contingency measures that would be implemented to mitigate against these risks; and			
	g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.			
	The Proponent must implement the approved management plan as approved from time to time by the Secretary.			
3/36	Deleted.			
3/37	Deleted.			
SCHEDUL	E 4: ADDITIONAL PROCEDURES			
NOTIFICA	TION OF LANDOWNERS			
4/1	As soon as practicable after obtaining monitoring results showing an:			
	a) exceedance of any relevant criteria in schedule 3, the Proponent must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each of affected landowner until the project is again complying with the relevant criteria; and	Not Yet Applicable	No exceedances have occurred to date.	D
	b) an exceedance of the relevant air quality criteria in schedule 3, the proponent must send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land.	Not Yet Applicable	No exceedances have occurred to date.	D
INDEPEN	DENT REVIEW			
4/2	If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the project on his/her land.	Not Applicable	No requests for an independent review are known to have been submitted to date.	A
	assessment of compliance			
D = Docume	ntation Sighted A = Advised b	by Austral Employ	yee O = Observation	

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Requirement	Compliance	Comment	Basis*
SCHEDUL	E 4: ADDITIONAL PROCEDURES (Cor	nt'd)	l	
INDEPENI	DENT REVIEW (Cont'd)			
4/2 (Cont'd)	If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Proponent must:			
	a) commission a suitably qualified, experienced and independent expert, whose appointment has been approved by the Secretary, to:			
	consult with the landowner to determine his/her concerns;			
	conduct monitoring to determine whether the project is complying with the relevant criteria in schedule 3; and			
	if the project is not complying with these criteria, then identify the measures that could be implemented to ensure compliance with the relevant criteria;			
	b) give the Secretary and landowner a copy of the independent review; and			
	c) comply with any written requests made by the Secretary to implement any findings of the review.			
4/3	If the independent review determines that the project is complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Secretary.	Not Applicable	No requests for an independent review are known to have been submitted to date.	A
	If the independent review determines that the project is not complying with the relevant criteria in schedule 3, then the Proponent must:			
	a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent expert, and conduct further monitoring until the project complies with the relevant criteria; or			
	b) secure a written agreement with the landowner to allow exceedances of the relevant criteria,			
	to the satisfaction of the Secretary.			
	assessment of compliance ntation Sighted A = Advised I	by Austral Employ	vee O = Observation	

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Red	quirement	Compliance	Comment	Basis*
SCHEDUL	E 5:	ENVIRONMENTAL MANAGEMEN	Γ, MONITORIN	IG, AUDITING AND REPORTING	
ENVIRONI	MEN	ITAL MANAGEMENT			
Environme	enta	I Management Strategy			
5/1	En <sup>o</sup>	e Proponent must prepare and an vironmental Management Strategy the project to the satisfaction of the cretary. The strategy must:	Compliant	The Plan was submitted to the Secretary on 18 March 2016 and approved on 13 May 2016. The Strategy was updated and approved 28 September 2018.	D
	a)	be submitted for approval to the Secretary prior to the commencement of construction activities;			
	b)	provide the strategic framework for environmental management of the project;			
	c)	identify the statutory approvals that apply to the project;			
	d)	describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;			
	e)	describe the procedures that would be implemented to:			
	•	keep the local community and relevant agencies informed about the operation and environmental performance of the project;			
	•	receive, handle, respond to, and record complaints;			
	•	resolve any disputes that may arise during the course of the project;			
	•	respond to any non-compliance; and			
	•	respond to emergencies; and			
	f)	include:			
	•	copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and			
	•	a clear plan depicting all the monitoring to be carried out in relation to the project.			
	app	e Proponent must implement the proved strategy as approved from e to time by the Secretary.			
* = Basis for	asse	essment of compliance			
D = Docume	ntatio	on Sighted A = Advised	by Austral Employ	/ee O = Observation	

# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Requirement	Compliance	Comment	Basis*
	E 5: ENVIRONMENTAL MANAGEMENT	Γ, MONITORIN	I IG, AUDITING AND REPORTING (Cont'd	l)
	MENTAL MANAGEMENT (Cont'd)	<u>·                                      </u>	•	•
Adaptive I	lanagement			
5/2	The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in schedule 3. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.	Not Yet Applicable	No exceedances of criteria have occurred to date.	A
	Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:			
	a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;	Not Yet Applicable	No exceedances of criteria have occurred to date.	A
	b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and	Not Yet Applicable	No exceedances of criteria have occurred to date.	A
	c) implement remediation measures as directed by the Secretary,	Not Yet Applicable	No directions received from the Secretary during the reporting period.	D
	to the satisfaction of the Secretary.			
Manageme	ent Plan Requirements		,	
5/3	The Proponent must ensure that the Management Plans required under this approval are prepared in accordance with any relevant guidelines, and include:	Compliant	All management plans were prepared as required by the Project Approval and approved by the Secretary. The updated management plans submitted also address these matters, as applicable.	D
	a) detailed baseline data;			
	b) a description of:			
	<ul> <li>the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> </ul>			
	any relevant limits or performance measures/criteria; and			
	<ul> <li>the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;</li> </ul>			
	assessment of compliance			
D = Documer	ntation Sighted A = Advised b	y Austral Employ	vee O = Observation	



# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Requirement		Compliance	Comment	Basis*
SCHEDUL	E 5:	ENVIRONMENTAL MANAGEMENT	T, MONITORIN	IG, AUDITING AND REPORTING (Cont'd	)
ENVIRON	ΙEΝ	ITAL MANAGEMENT (Cont'd)			
Manageme	ent I	Plan Requirements (Cont'd)			
5/3 (Cont'd)	c)	a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;			
	d)	a program to monitor and report on the:			
	•	impacts and environmental performance of the project; and			
	•	effectiveness of any management measures (see (c) above);			
	e)	a contingency plan to manage any unpredicted impacts and their consequences;			
	f)	a program to investigate and implement ways to improve the environmental performance of the project over time;			
	g)	a protocol for managing and reporting any:			
	•	incidents;			
	•	complaints;			
	•	non-compliances with statutory requirements; and			
	•	exceedances of the impact assessment criteria and/or performance criteria; and			
	h)	a protocol for periodic review of the plan.			
	of t uni	te: The Secretary may waive some these requirements if they are necessary or unwarranted for rticular management plans.			
Annual Re	viev	N			
5/4	anr mu per sat	the end of December 2016, and nually thereafter, the Proponent st review the environmental formance of the project to the isfaction of the Secretary. This iew must:	Compliant	The first Annual Review was prepared for 2016 and the report updated as directed by the Secretary. This Annual Review has been prepared in accordance with this condition.	D
	a)	describe the development (including rehabilitation) that was carried out in the previous calendar year, and the works that are proposed to be carried out over the next year;			
		ssment of compliance			
D = Documer	tatio	n Sighted A = Advised b	y Austral Employ	ee O = Observation	

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Red	quirement	Compliance	<u> </u>	Basis*						
SCHEDULE 5: ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING (Cont'd)											
ENVIRONMENTAL MANAGEMENT (Cont'd)											
Annual Review (Cont'd)											
5/4 (Cont'd)	b)	include a comprehensive review of the monitoring results and complaints records of the project over the past year, which includes a comparison of these results against:									
	•	the relevant statutory requirements, limits or performance measures/criteria;									
	•	the monitoring results of previous years; and									
	•	the relevant predictions in the documents listed in condition 2 of Schedule 2;									
	c)	identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;									
	d)	identify any trends in the monitoring data over the life of the project;									
	e)	identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and									
	f)	describe what measures will be implemented over the next year to improve the environmental performance of the project.									
Revision o	f St	rategies, Plans and Programs									
5/5	Wit an: a)	hin 3 months of the submission of annual review under condition 4 above:	Compliant	All management plans were reviewed during the preparation of the 2018 Annual Review. Excluding the Water Management Plan which is awaiting approval, no updates to remaining management plans were required.  A further review of the management plans will be completed within 3 months of submission of the 2019 Annual Review.	D, A						
	b)	incident report under condition 7 below;									
	c)	audit report under condition 9 below; and									
	d)	any modifications to this approval,									
	ned and app	Proponent must review, and if cessary revise, the strategies, plans, d programs required under this proval to the satisfaction of the cretary.									
* = Basis for a	asses	ssment of compliance									
D = Documer	ntatio	n Sighted A = Advised b	y Austral Employ	ee O = Observation							



# Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Requirement	Compliance	Comment	Basis*			
SCHEDUL	E 5: ENVIRONMENTAL MANAGEMENT	, MONITORIN	IG, AUDITING AND REPORTING (Cont'd	l)			
ENVIRON	MENTAL MANAGEMENT (Cont'd)						
Revision o	f Strategies, Plans and Programs (Cor	nt'd)					
	Within 4 weeks of conducting any such review, the Proponent must advise the Secretary of the outcomes of the review, and provide any revised documents to the Secretary for review and approval.  Note: This is to ensure the strategies,						
	plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.						
Communit	y Consultative Committee						
5/6	The Proponent must establish and operate a CCC for the project to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Department's Community Consultative Committee (CCC) Guidelines for State Significant Projects (November 2016, or its latest version), and be operating prior to any development being carried out on site under this approval.	Compliant	The first meeting of the CCC was held on 7 September 2016. The CCC has been operated in accordance with the guidelines and as directed by the committee (see Section 9 of this document).	D			
	Notes:						
	<ul> <li>The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.</li> <li>In accordance with the guideline, the Committee should comprise an independent chair and appropriate representation from the Proponent Council recognized appropriate groups.</li> </ul>						
	appropriate representation from the Proponent, Council, recognised environmental groups and the local community.						
REPORTIN	IG						
Incident R	eporting						
	The Proponent must notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent must notify the Secretary and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Not Yet Applicable	No reportable incidents occurred during the reporting period.	A			
	assessment of compliance station Sighted A = Advised b	y Austral Employ	ee Observation				

#### Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

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Condition No.	Red	quirement	Compliance	Comment	Basis*
SCHEDUL	E 5:	ENVIRONMENTAL MANAGEME	NT, MONITORIN	NG, AUDITING AND REPORTING (Cont'	d)
ENVIRON	MEN	ITAL MANAGEMENT (Cont'd)			
Regular R	еро	rting (Cont'd)			
5/8	The Proponent must provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.		Compliant	Any relevant information is posted on the Austral website.	D, A
INDEPEN	DEN	T ENVIRONMENTAL AUDIT		,	
5/9	Within a year of the commencement of development on site under this approval, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission, commence and pay the full cost of an Independent Environmental Audit of the project. This audit must:		,	The initial independent audit was undertaken in August 2017 (i.e. within 1 year following physical commencement). The audit was conducted by Trevor Brown & Associates whom were approved by the Secretary. The audit addressed all relevant matters.  The next audit is required by August	D
	a)	be conducted by suitably qualified experienced and independent team of experts whose appointment has been endorsed by the Secretary;	,	2020.	
	b)	include consultation with the relevant agencies;			
	c)	assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL and/or Water License (including any assessment, plan or program required under these approvals);			
	d)	review the adequacy of any approved strategy, plan or program required under these approvals;	m		
	e)	recommend measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under these approvals; and			
	f)	be conducted and reported to the satisfaction of the Secretary.			
	sui exp	te: This audit team must be led by a tably qualified auditor and include perts in any fields specified by the cretary.	7		



## Table A1-1 (Cont'd) Compliance Review of PA 08\_0212 for New Berrima Clay/Shale Quarry for the Reporting Period

Condition	Box	nuiroment.	Compliance		29 of 29
No.		quirement	Compliance		Basis*
				IG, AUDITING AND REPORTING (Cont'd	l)
	_	T ENVIRONMENTAL AUDIT (Cont'			ı
5/9A	aud oth a c Sec any aud imp	thin 12 weeks of commencing each dit, unless the Secretary agrees erwise, the Proponent must submit opy of the audit report to the cretary, together with its response to recommendations contained in the dit report, and a timetable for the olementation of any measures sposed to address the commendations.	Compliant	The audit was submitted 30 October 2017 with the response action plan.	D
5/10	aud Sed Sed any	thin 3 months of commissioning this dit, or as otherwise agreed by the cretary, the Proponent must submit opy of the audit report to the cretary, together with its response to recommendations contained in the dit report.	Compliant	The audit was submitted 30 October 2017 with the response action plan.	А
ACCESS T	ΓΟ ΙΙ	NFORMATION			
5/11	dev	llowing the commencement of velopment on site under this proval, the Proponent must:	Compliant	The required documentation is maintained on the Austral website and appears up to date.	D
	a)	make the following information publicly available on its website:			
	•	the documents listed in condition 2 of Schedule 2;			
	•	current statutory approvals for the project;			
	•	approved strategies, plans or programs;			
	•	a summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;			
	•	a complaints register, updated on a quarterly basis;			
	•	minutes of CCC meetings;			
	•	copies of any annual reviews (over the last 5 years);			
	•	any independent environmental audit, and the Proponent's response to the recommendations in any audit; and			
	•	any other matter required by the Secretary; and			
	b)	keep this information up-to-date,			
	to t	he satisfaction of the Secretary.			
* = Basis for		ssment of compliance		Q = Observation	

D = Documentation Sighted A = Advised by Austral Employee O = Observation



New Berrima Clay/Shale Quarry

**2019 ANNUAL REVIEW** 

Report No. 744/29

# **Appendix 2**

# Compliance Review of M(MOL)6

(Total No. of pages including blank pages = 6)

New Berrima Clay/Shale Quarry

**2019 ANNUAL REVIEW**Report No. 744/29

## Table A Compliance Review – M(MO)L 6

Page 1 of 4

Cond. No.	Со	nditional Requirement	Compliance	Comments	Basis
Gener	al C	onditions			
1. Reh	abili	tation			
	car	y disturbance resulting from the activities ried out under this mining lease must be abilitated to the satisfaction of the Minister.	Not Yet Applicable	No areas have become available for final rehabilitation.	D, A
2. Mini	ing (	Operations Plan			
(a)	Mir any inc pro Mir MC sig mir	e leaseholder must comply with an approved hing Operations Plan (MOP) in carrying out y significant surface disturbing activities, luding mining operations, mining purposes and especting. The leaseholder must apply to the hister for approval of a MOP. An approved OP must be in place prior to commencing any nificant surface disturbing activities, including hing operations, mining purposes and especting.	Compliant	A Mining Operations Plan for M(MO)L6 was approved by the Resources Regulator on 19 September 2018 with further approval received 24 May, 8 and 12 July 2019 providing for drilling of both piezometers and quality control holes. These activities were completed in accordance with the MOP and activity approval application (ESF4).	D, A
(b)	and	e MOP must identify the post mining land use d set out a detailed rehabilitation strategy ich:	Compliant		D
	i)	Identifies areas that will be disturbed;		MOP Plan 5 identifies the ultimate extent of disturbance and rehabilitation.	
	ii)	Details the staging of specific mining operations, mining purposes and prospecting;		MOP Section 2 outlines the mining operations during the MOP term and includes an indicative yearly production summary. Plans 3A to 3G also provided indicative annual 'staging'.	
	iii)	Identifies how the mine will be managed and rehabilitated to achieve the post mining land use;		MOP Sections 5 to 8 outline the rehabilitation phases, completion criteria and activities during and following the MOP term.	
	iv)	Identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and		Environmental management measures are principally outlined in MOP Section 3.	
	v)	Reflects the conditions of approval under:		Relevant conditional	
		<ul> <li>the Environmental Planning and Assessment Act 1979;</li> </ul>		requirements for other approvals are outlined within MOP Section 4.1.	
		<ul> <li>the Protection of the Environment Operations Act 1997; and</li> </ul>			
		<ul> <li>any other approvals relevant to the development including the conditions of this mining lease.</li> </ul>			
(c)	the	e MOP must be prepared in accordance with ESG3: Mining Operations Plan (MOP) idelines.	Compliant	MOP Section 1.1 confirms the MOP has been prepared in accordance with these guidelines. Section headings and information presented are also generally consistent with ESG3.	D

\* = Basis for assessment of compliance

D = Documentation sighted

A = Advised by Company Employee
O = Observation during inspection



## Table A (Cont'd) Compliance Review - M(MO)L 6

Page 2 of 4

Cond. No.	Co	nditional Requirement	Compliance	Comments	Basis*
Genera	al Co	onditions (Cont'd)			
(d)		e leaseholder may apply to the Minister to end an approved MOP at any time.	Not Yet Applicable	No MOP amendments have been sought to date (as the original MOP provided for drilling activities subject to receipt of activity approval).	D, A
3. Ann	ual F	Rehabilitation Report			
(a)	Rel	e leaseholder must submit an Annual habilitation Report which includes, but is not ited to the following:  A plan, or plans, which identifies the location (including coordinates) of all disturbance areas that are the subject of previous,	Compliant	Correspondence from the Resources Regulator dated 19 June 2018 confirm that the Annual Review (as required by Project Approval 08_0212) can be accepted in lieu of an Annual	D
		current or future rehabilitation activities.		Rehabilitation Report. The 2018	
	ii)	A brief description of all surface disturbing activities carried out during the report period. The location and size (in hectares) of each of the disturbance areas is to be identified on a plan.		Annual Review was submitted on 28 February 2019 (i.e. within the required timeframe).	
	iii)	A brief description of rehabilitation undertaken during the reporting period (for example, area reshaped and seeded for pasture). The location and size (in hectares) of the rehabilitation areas are to be identified on a plan.			
	iv)	A description of rehabilitation monitoring programs and analysis of results of rehabilitation monitoring programs, including a summary of whether rehabilitation is trending towards meeting the objectives and completion criteria.			
	v)	A brief description of the rehabilitation care and maintenance works to be undertaken over the next 12 months to address the outcomes of the monitoring program.			
	vi)	A brief description of the rehabilitation forecast for the next 12 months. The location and size (in hectares) of the proposed rehabilitation areas are to be identified on a plan.			
	vii)	Photographs of each disturbance area including those areas where rehabilitation activities have been conducted.			
(b)	sub dat Sed	e Annual Rehabilitation Report must be omitted within 90 days of the grant anniversary e, unless otherwise approved by the cretary.  omplied / not complied with. Compliance no longer re	Compliant	As above.	D

D = Documentation sighted

A = Advised by Company Employee O = Observation during inspection



<sup>\* =</sup> Basis for assessment of compliance

## Table A (Cont'd) Compliance Review – M(MO)L 6

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Cond.				<u> </u>
No.	Conditional Requirement	Compliance	Comments	Basis*
	al Conditions (Cont'd)			
	-compliance and Incident Reporting	<b>N</b> 1 4	N. 1	
(a)	The leaseholder must notify the Department immediately after becoming aware of any of the following:  i) Any breaches of the conditions of this mining lease or breaches of the Act or Regulation.	Not Applicable	No breaches of this lease or breaches causing or threatening environmental harm and no notifications under S148 of the POEO Act occurred during the reporting period.	D, A
	ii) Any breaches of environment protection legislation causing or threatening material harm to the environment, arising in connection with significant surface disturbing activities, including mining operations, mining purposes and prospecting operations, under this mining lease.			
	iii) Any notification made under section 148 of the <i>Protection of the Environment Operations Act 1997</i> arising in connection with significant surface disturbing activities including mining operations, mining purposes and prospecting operations, under this mining lease.			
(b)	Notifications must be provided through the Department's website.	Not Applicable	As above.	D, A
5. Envi	ironmental Incident Report			
(a)	The leaseholder must submit an Environmental Incident Report to the Department within seven (7) days of:	Not Applicable	As above.	D, A
	All breaches referred to in condition 4(a)(i) that caused or threatened material harm to the environment;			
	ii) All breaches referred to in condition 4(a)(ii).			
(b)	The Environmental Incident Reporting must include the following:	Not Applicable	As above.	D, A
	i) The details of the mining lease;			
	ii) Contact details for the leaseholder;			
	iii) A map identifying the location of the incident and where material harm to the environment has or is likely to occur;			
	iv) A description of the nature of the incident or breach, likely causes and consequences;			
	v) A timetable showing actions taken or planned to address the incident and to prevent future incidents or breaches referred to in condition 5(a);  # - Complied / not complied with. Compliance no longer re			

\* = Basis for assessment of compliance

D = Documentation sighted

A = Advised by Company Employee O = Observation during inspection



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## Table A (Cont'd) Compliance Review – M(MO)L 6

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Cond. No.	Со	nditional Requirement	Compliance	Comments	Basis*					
Genera	General Conditions (Cont'd)									
5. Envi	nvironmental Incident Report (Cont'd)									
(b) (Cont'd)	vi)	Summary of all previous incidents or breaches which have occurred in the previous 12 months relating to significant surface disturbing activities, including mining operations; and								
	vii)	Mining purposes and prospecting operations under this mining lease.								
6. Secu	ırity	,								
(a) (b)	ma the und all d aris	e leaseholder is required to provide and intain a security deposit to secure funding for fulfilment of obligations of all or any kind der the mining lease, including obligations of or any kind under the mining lease that may se in the future.  sount: \$10,000.	Compliant	A bond of \$10,000 was paid on 11 April 2017. Following receipt of a Notice of Assessed Deposit dated 19 September 2018 (in response to the submitted MOP and Rehabilitation Cost Estimate), a bank guarantee for \$489,000 was established (dated 17 October 2018).	A					
			guired to be acc	,						
Yes <sup>#</sup> No	# - C	omplied / not complied with. Compliance no longer re	quired to be ass	essed						

<sup>\* =</sup> Basis for assessment of compliance

A = Advised by Company Employee

D = Documentation sighted

O = Observation during inspection

## **Appendix 3**

# Meteorological Data Recorded during 2019

(Total No. of pages including blank pages = 4)

New Berrima Clay/Shale Quarry

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Table A3-1 2019 Daily Rainfall Records - New Berrima Clay/Shale Quarry Weather Station

Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	1.2	0.2	0	0	0	0	0.2	0.2	0	0	0
2	0	2.6	0.2	0	0	0	0	0.2	0	0	0	8.0
3	14	0.2	0	0.2	1.4	1.2	0	0	0	0	6.2	0
4	0	0.6	0	7	4.4	35.6	0.6	0	0	0	0.6	0
5	0	0.2	0	0.4	0.2	1.8	3.6	0	0	10.8	0	0
6	1.4	1.2	0	0	0.2	0	1.4	0	3.4	0.2	0	0
7	0.8	0.2	0	0	0	0	0.4	0	0	0	0	0
8	0	0.4	0	0	0.6	0.2	3	0.2	0	2.8	0	0
9	19.8	0.2	0	0	0	0.2	0.2	1.8	0.2	0	0	0
10	0.8	0	0	0	2	1.2	0	0	0	0	0	0
11	1	0	0	0	0	0	0	0.2	0	0	0	0
12	12.6	0	0	0	0	0	0	0	0	1.2	0	0
13	0.2	0	0	0	3.2	0	0.2	0	0	0.2	0	0
14	0	0	28.2	0	0	0	0	0	0	0.2	0	0
15	0	0	0.6	0.2	0.4	0	0	0	0	0	0	0
16	0	0	5.8	0.4	0.2	11	0	0	7	0.2	0	0
17	0	0	31.4	0.2	0	3	0	0	24.6	0.2	0	0
18	0	0	16.8	0.2	0	1	0	0	0.2	0	0	0
19	0	0	17.6	0	0.4	0	0	0	2.2	0	0	0
20	0.2	0.2	0.4	0	0	0	0	0	0.6	0	0	0
21	0.4	0	0.2	0	0	0.2	0	0	4.2	0	0	0
22	0.4	0	0.8	0	0	0	0	0	0.2	0	0	0
23	0.2	0	0.2	0.4	0.2	0.4	0	0	0.2	0	0	0
24	0.8	0	0.2	0	0.4	3	0	0	0	3	0.2	0
25	0.2	0	1	0	0	0.6	0	0	0	0	0	0.4
26	0	0	0	0	0	0	0	4.8	0	0	3.2	0
27	0	0	0	0	0	1.6	0	1.6	0	0	0	0
28	1	0	0	0	0	0	0	0.2	0	0	0	0
29	0.8		0	0	0	0.2	0	9.4	0	0	0	0
30	0		11.6	0	0	0.2	0.2	2.4	0	0	0.2	0
31	0		0.2		0		0	0		0		0
Total	54.6	7.0	115.4	9.0	13.6	61.4	9.6	21.0	43.0	18.8	10.4	1.2

Table A3-2 Monthly Rainfall Records - New Berrima Clay/Shale Quarry Weather Station

Year / Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2016	-		-	-	-		-	-	-	35.0	33.0	49.8	
2017	34.8	80.8	180.6	24.2	25.0	19.4	19.4	17.6	2.0	39.6	88.4	33.6	565.4
2018	55.2	95.6	20.0	21.2	15.8	52.2	4.4	17.0	10.2	57.8	119.0	71.0	539.4
2019	54.6	7.0	115.4	9.0	13.6	61.4	9.6	21.0	43.0	18.8	10.4	1.2	365.0
Minimum	34.8	7.0	20.0	9.0	13.6	19.4	4.4	17.0	2.0	18.8	10.4	1.2	365.0
Average	44.9	47.6	84.0	15.9	17.0	38.1	9.5	18.2	14.3	34.0	52.2	31.4	458.7
Maximum	55.2	95.6	180.6	24.2	25.0	61.4	19.4	21.0	43.0	57.8	119.0	71.0	565.4

<sup>\*</sup> Weather station commissioned 18/09/2016

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