

# TITLE: ENVIRONMENTAL MANAGEMENT STRATEGY

Badgerys Creek Quarry and Brick Making Project 235 Martin Road, Badgerys Creek, NSW, 2171

## **Table of Contents**

1	Introdu	uction 5	
1.1	Pu	ırpose	5
1.2	Sc	ope and Application	5
1.3	En	nvironmental Management Plans, Strategies, Programs and Protocols	ε
1.4	De	efinitions and Abbreviations	7
2	_	ic Framework for Environmental Management	
2.1		ork health, safety and environmental policy	
2.2		vironmental Context	
2.3		nvironmental Management Strategy	
2.4		spects and Impacts	
2.5	Ris	sk Assessment	11
3	-	Approval Conditions	
3.1		mits of Approval	
3.2	НС	ours of Operation	35
4	_	tory Framework	
4.1		nvironmental Legislation	
4.2		anning Instruments	
4.3		odes, Standards and Guidelines	
4.4		ermits and Licences	
	4.4.1	Environment Protection Licence 684	41
	4.4.2	Mining Lease 1771	
	4.4.3	Water Licence	41
	4.4.4	Enforceable Undertaking	42
5	_	sation, Training and Resource Requirements	
5.1		ganisation, Roles and Responsibilities	
5.2		aining	
5.3	Re	esource Requirements	44
6		nmental Management Measures	
6.1		anagement Plan Requirements	
6.2		onstruction Environmental Management	
6.3	-	perational Environmental Management	
	6.3.1	Extraction Limitations	53
	6.3.2	Additional rehabilitation matters	54



	6.3.3	Dewatering	54
7	Monito	ring and Performance Criteria	55
7.1	Ge	neral	55
7.2	En	vironmental Monitoring	55
7.3	Co	nstruction Monitoring	55
	7.3.1	Operational Monitoring and Inspections	55
7.4	Ins	spections	61
8	Evaluati	ion and Review	62
8.1		inual Review	
8.2	Str	rategy, Plan and Program Revision	62
9 9.1	Reporti	-	6.4
9.1		gular Reporting porting under the Conditions of Approval	
9.3		porting under the Mining Lease	
9.4		porting under the EPL	
J. <del>T</del>	9.4.1	Information Required on the Website	
9.5		•	
9.5	9.5.1	cident and Non-compliance Reporting  Responsibility	
	9.5.2	Notification Requirements	67
	9.5.3	Incidents and non-compliance procedure	69
	9.5.4	Incidents and non-compliance register	71
	9.5.5	Minor environmental incidents	71
	9.5.6	Incident reporting	71
9.6	Inc	dependent Review	72
9.7	En	vironmental Auditing	72
	9.7.1	Independent Environmental Audits	72
	9.7.2	Rehabilitation Progress Audit	73
9.8	En	vironmental complaints	73
	9.8.1	Environmental Complaints	73
	9.8.2	Responsibility	73
	9.8.3	Procedure	74
	9.8.4	Dispute Resolution	75
9.9	Otl	her Notification Requirements	75
	9.9.1	Out-of-hours Works	75
	9.9.2	Written report to EPA	75
	9.9.3	Discovery of Human Remains	76
	9.9.4	Unexpected Heritage Find	76
	995	High Impact Noise Activities	76



9.9.6	Breach of Water Licence Conditions	76
10 Comm	unity Consultation Procedures	77
11 Refere	nce 78	
FIGURE 1 -	SITE LOCATION	79
FIGURE 2 -	PROJECT LAYOUT	80
FIGURE 3 -	MONITORING LOCATIONS	81
FIGURE 4 -	SURVEY AREA PIT 3	82
APPENDIX A	CONDITIONS OF APPROVAL	83
APPENDIX E	B ENVIRONMENT PROTECTION LICENCE	84
APPENDIX (	MINING LEASE	85
APPENDIX [	WATER APPROVAL AND LICENCE	86
APPENDIX E	ENFORCEABLE UNDERTAKING	87
APPENDIX F	NOISE MANAGEMENT PLAN	88
APPENDIX (	AIR QUALITY MANAGEMENT PLAN	89
APPENDIX H	SOIL AND WATER MANAGEMENT PLAN	90
APPENDIX I	GROUNDWATER MANAGEMENT PLAN	91
APPENDIX J		
APPENDIX R	ABORIGINAL HERITAGE MANAGEMENT PLAN	93
APPENDIX L	REHABILITATION MANAGEMENT PLAN	94
APPENDIX N	WASTE MANAGEMENT PLAN	95
APPENDIX N	N COMMUNITY AND STAKEHOLDER CONSULTATION PLAN	96
APPENDIX (		
APPENDIX F	P EMERGENCY MANAGEMENT RESPONSE PLAN	98
APPENDIX (	Q VISUAL IMPACT MANAGEMENT PLAN	99
APPENDIX F	R VENM MANAGEMENT PLAN	100
APPENDIX S		
APPENDIX 1		
APPENDIX U	J FAUNA RELOCATION MANAGEMENT PLAN	103
APPENDIX \	/ EVACUATION PLAN	104
APPENDIX \	N ENVIRONMENTAL RISK REGISTER	105

Page 3 of 105 CSR Limited



## **Document control page**

Document Preparation and Control	Document Review
Nelma Arancibia	
Document Approval	Signature
Nelma Arancibia	- Garquelie

Project Document Code	Latest Version Number	Latest Version Date
BRK-BAD 2021.2.9 EMS	06	3 <sup>rd</sup> May 2021

Document Version History						
Version No.	Date	Document Status	Brief Description of Change(s) from Previous Version			
01	03/02/2021	DRAFT	Updated for peer review			
02	09/02/2021	Peer review	Reviewed by Element and comments provided			
03	09/02/2021	Updated	Updated to incorporate peer review comments			
04	23/03/2021	Updated	Updated to reflect approved Phase 1a			
05	16/04/2021	Update	Updated following DPIE review and responding to RFI			
06	03/05/2021	Update	Update table in section 1.3			

Page 4 of 105 CSR Limited



#### 1 Introduction

### 1.1 Purpose

CSR Building Products Limited (CSR) will implement all practicable measures to prevent or minimise harm to the environment that may result from the Badgerys Creek Quarry and Brick Making Project.

This EMS has been prepared in accordance with Schedule 5, Condition 1 of the Project Approval. Table 1 EMS requirements outlines the section of the EMS where each sub-condition in Schedule 5, Condition 1 has been addressed.

Table 1 EMS requirements

Requirement	EMS section
1. The Proponent must prepare an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must:	
(a) be submitted to the Secretary for approval within 6 months of the determination of Modification 3 and 4, unless otherwise agreed by the Secretary;	Noted
(b) provide the strategic framework for environmental management of the project;	2
(c) identify the statutory approvals that apply to the project;	3, 4
(d) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;	5.1
(e) set out the procedures that would be implemented to:	
<ul> <li>keep the local community and relevant agencies informed about the operation and environmental performance of the project;</li> </ul>	9, 10
receive, record, handle and respond to complaints;	9.5
<ul> <li>resolve any disputes that may arise during the course of the project;</li> </ul>	9.5
respond to any non-compliance and any incident; and	9.2
respond to emergencies; and	Appendix K
(f) include:	
<ul> <li>references to any strategies, plans and programs approved under the conditions of this approval; and</li> </ul>	1.3
<ul> <li>a clear plan depicting all the monitoring to be carried out under the conditions of this approval.</li> </ul>	7

## 1.2 Scope and Application

The Badgerys Creek Brickworks (Site) is located at 235 Martin Road, Badgerys Creek, 41 kilometres to the south west of Sydney, within the Liverpool City Council Local Government Area (LGA) (see Figure 1). Primary access to the site is provided through Martin Road at the north eastern corner of the site. Features of the existing site are shown on Figure 2.

Page 5 of 105 CSR Limited



As outlined in Section 2.2, this Environmental Management Strategy (EMS) applies to Phase 1a of the Project including:

- Dewatering of pits 1, 2 and 3; and
- Importation of VENM to backfill pits 1, 2 and 3 as part of quarry rehabilitation works.

Hereafter, Phase 1a is referred to as 'the Project'. The Project layout including the location of pits to be dewatered and backfilled is shown on Figure 2.

## 1.3 Environmental Management Plans, Strategies, Programs and Protocols

The main body of this document outlines the environmental management system and processes relevant to the delivery of the Project in accordance with the regulatory, contractual and other requirements. The main body of this document also provides the overall objectives, roles and responsibilities, legal and other requirements, training, monitoring, auditing and reporting requirements for the Project.

The EMS consists of this main document plus a series of 17 environmental management plans as outlined below:

- A: Conditions of Approval (CofA)
- B: Environmental Protection Licence (EPL)
- C: Mining Lease (ML)
- D: Water Approval and Licence (WL)
- E: Enforceable Undertaking (EU)
- F: Noise Management Plan (NMP)
- G: Air Quality Management Plan (AQMP)
- H: Soil and Water Management Plan (SWMP)
- I: Groundwater Management Plan (GWMP)
- J: Traffic Management Plan (TMP)
- K: Aboriginal Heritage Management Plan (AHMP)
- L: Rehabilitation Management Plan (RMP)
- M: Waste Management Plan (WMP)
- N: Community and Stakeholder Consultation Plan (CCP)
- O: Mining Operations Plan (MOP)
- P: Emergency Management Response Plan (EMRP)
- Q: Visual Impact Management Plan (VIMP)
- R: VENM Management Plan (VMP)
- S: De-watering Infrastructure Plan (DWIP)
- T: De-watering Management Plan (DWMP)

Page 6 of 105 CSR Limited



U: Fauna Relocation Management Plan (FRMP)

V: Evacuation plan (EP)

W: Environmental Risk Register (ERR)

The sub plans form appendices to the EMS and these documents provide detailed strategies for the planning, implementation, operation, inspection and monitoring requirements for a range of specific environmental issues. The management plans and their relationship to the EMS are shown in Diagram 1.

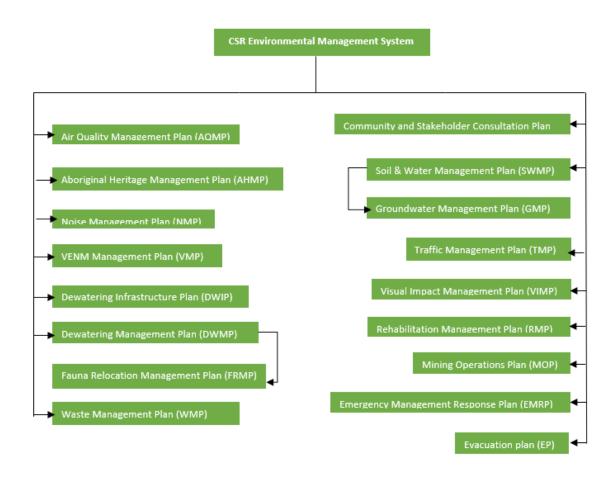


Diagram 1: Environmental Management Plans, Strategies, Programs and Protocols

### 1.4 Definitions and Abbreviations

Bgl: Below Ground Level

Conditions of Conditions contained in Schedules 2 to 5 of the Project Approval under Section Approval (CoA): 75J of the EP&A Act for the Badgerys Creek Quarry and Brick Making Project

Secretary: Secretary of the Department of Planning, Industry and Environment, or

delegate

Page 7 of 105 CSR Limited



DPI&E (Water) Department of Planning, Industry and Environment (Water)

MEG: Mining, Exploration and Geoscience in NSW

DPI&E: NSW Department of Planning, Industry and Environment

EPL: Environment Protection Licence

Incident: An occurrence or set of circumstances that causes or threatens to cause

material harm to the environment, and/or breaches or exceeds the limits or

performance measures/criteria in the conditions of approval.

Non-compliance: An occurrence or set of circumstances that is a breach of conditions of

approval 10\_0014, EPL 684, or ML 1771

NRAR: Natural Resources Access Regulator

Material harm to the environment:

Is unauthorised harm that:

• involves actual or potential harm to the health or safety of human

beings or to ecosystems that is not trivial, or

 results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make

good harm to the environment).

ML: Mining Lease

BCD: NSW Biodiversity and Conservation Division of Department of Planning,

Industry and Environment

Rehabilitation: The treatment or management of land disturbed by the project for the

purpose of establishing a safe, stable and non-polluting environment, and

includes remediation.

Water NSW: State-owned Corporation established under the Water NSW Act 2014

CSR: Notes the Parent company CSR Limited but also includes its subsidiary PGH

Bricks and Pavers.

VENM Virgin Excavated Natural Material, as defined in the *Protection of the* 

Environment Operations Act 1997

Page 8 of 105 CSR Limited



#### 2 Strategic Framework for Environmental Management

In addition to meeting the specific performance measures and criteria established under the development approval, CSR will implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the Project, and any rehabilitation required under the approval.

## 2.1 Work health, safety and environmental policy

CSR Work Health, Safety and Environmental Policy provides the following commitments and objectives:

- complying with the laws, regulations and our operational policies and standards; establishing measurable WHSE objectives and targets, recognising and celebrating their achievement;
- identifying, assessing and controlling hazards and impacts, and adopting an approach that will strive to eliminate or reduce the risk to an acceptable level;
- informing employees, contractors (and their sub-contractors), visitors and the public of these hazards and impacts, that may cause potential harm to them, our business and/or our environment;
- identifying, implementing, monitoring and reinforcing the safe behaviours we expect in our business to eliminate unsafe acts and practices;
- providing appropriate workplace health, safety and environmental training to employees and contractors;
- investigating incidents and sharing the learning's with all applicable stakeholders to prevent re- occurrences; and
- consulting and communicating with employees and contractors to continually improve the work health, safety and environmental performance in our workplaces.

All employees, contractors, sub-contractors and visitors are expected to comply with this policy and the conditions of approval relevant to activities they carry out in respect of the Project, and Management will provide the necessary resources and training to ensure this compliance.

#### 2.2 Environmental Context

Quarrying and brick making activities have been undertaken on the site for over 30 years. In August 2020, a modification (Mod 3&4) to the development consent was granted by the Minister for Planning and Public Spaces to continue operations on the site including dewatering of the quarry pits, extraction of clay (quarrying), brick manufacturing, and importation of VENM to backfill and rehabilitate the quarry pits.

The Department of Planning, Industry and Environment (DPIE) has since approved the delivery of the Project and associated strategies, plans and programs in stages as follows:

Phase 1a:

Dewatering of pits 1, 2 and 3; and

Page 9 of 105 CSR Limited



Importation of VENM to backfill pits 1, 2 and 3 as part of quarry rehabilitation works.

#### Phase 1b:

- Construction activities;
- Brickmaking activities; and
- Quarrying activities in Pit 3.

This EMS applies to Phase 1a of the Project.

## 2.3 Environmental Management Strategy

The environmental management strategy for Badgerys Creek can be summed up as follows:

Site Rehabilitation works:

- Commence the Dewatering activities for Pit 1, 2 and 3.
- Commence the site rehabilitation works and importing VENM material to back fill pits 1,2 and 3.
- Treat and discharge surface water as required.
- ensure water as far as practical does not get diverted into pit 1, 2 and 3.

## 2.4 Aspects and Impacts

Dewatering and Rehabilitation (VENM import) works will comprise:

- VENM fill import.
- discharge of pit water off site.
- bulk earthworks movement.
- bulk earthworks compaction.
- water diversion.
- water pumping.

The environmental aspects from these activities include:

- ground disturbance;
- noise;
- dust generation;
- air emissions;
- waste generation;
- surface runoff;
- groundwater movement; and
- rehabilitation.

The Environmental Assessment of the Project identified potential impacts from the above aspects of the Project and outlined a suite of mitigation measures. These mitigation measures are being adopted in this EMS and framed within the CSR environmental policies and procedures for its facilities of similar nature.

Page **10** of **105** 



#### 2.5 Risk Assessment

CSR will assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures described in each management plan and summarised in Section 7.0. Any exceedance of these criteria and/or performance measures constitutes a breach of the Approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

CSR maintains an Environmental Risk Register for the Badgerys Creek project (Appendix W). The register assesses the environmental impacts of the pit dewatering and VENM importation activities of the Badgerys Creek facility and ranks the associated environmental risks from low to high and flags where appropriate risk mitigation measures need to be put in place. The Environmental Risk Register is reviewed every 12 months (or more frequently in times of high project activity) to assess residual risks and provide for enhanced risk mitigation measures.

Page **11** of **105** 



## **3** Project Approval Conditions

Any exceedance of criteria and/or performance measures required by the conditions of approval constitutes a breach of the approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Table 2 outlines the section of the EMS or the relevant management plan where each condition has been addressed.

Table 2 Conditions of approval

Sched	Condition	Condition Text	Where covered
2	ADMINISTR	RATIVE CONDITIONS	
2	1	OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT In addition to meeting the specific performance measures and criteria established under this approval, the Proponent must implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the project, and any rehabilitation required under this approval.	6.0 and the management plans
2	TERMS OF	APPROVAL	
2	2	The Proponent, in acting on this approval, must carry out the project:  (a) in compliance with the conditions of this approval;  (b) in accordance with all written directions of the Secretary; and (c) in accordance with the project layout.	Implementation of the EMS
2	3	The Proponent, in acting on this approval, must carry out the project:  (a) generally in accordance with the EA;  (b) generally in accordance with EA (Mod 1);  (c) generally in accordance with EA (Mod 2); and  (d) in accordance with the Statement of Commitments.	Implementation of the EMS
2	4	The conditions of this approval and directions of the Secretary prevail to the extent of any inconsistency, ambiguity or conflict between them and a document referenced in condition 3 of this Schedule. In the event of an inconsistency, ambiguity or conflict between any of the documents referenced in condition 3 of this Schedule, the most recent document prevails.	Noted
2	5	Consistent with the requirements of this approval, the Secretary may make written directions to the Proponent in relation to:  (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this approval, including those that are required to be, and have been, approved by the Secretary; and  (b) the implementation of any actions or measures contained in any such document referred to in (a) above.	Noted

Page 12 of 105 CSR Limited



Sched	Condition	Condition Text				Where covered
2	6	COMPLIANCE The Proponent must ensure that all of its emp instructed to comply with, the conditions of the		5.2		
2	7	APPLICABILITY OF GUIDELINES References in the conditions of this approval to protocols, standards or policies in the form the However, consistent with the conditions of this Secretary may, when issuing directions under require compliance with an updated or revised them.	approval, the ment obligations,	Implementation of the EMS		
2	LIMITS OF	APPROVAL				
2	8	The Proponent may carry out quarrying opera Note: Under this approval, the Proponent is recrequirements. Consequently, this approval will quarrying operations, until the rehabilitation of required standard.	rrying out of	3.1		
		The Proponent must not exceed the limits in T				
		Table 1: Limits on extraction, production, receival  Activity	and dispatch volumes per ca Project Phase	Total Volume (tonnes per calendar year)		
		Extraction from Pit 3	Phase 1 and 2	420,000		
		Receive raw materials for brickmaking	Phase 1 and 2 Phase 3 onwards	215,000 360,000		
		Dispatch raw materials	Phase 1,2 and 3	275,000		
2	10	Brick production	All Phases	300,000		3.1
		Dispatch finished building products	All Phases	330,000		
		Note: The Total Volume limits in Table 1 do not import of VENM is separately managed uthis Schedule.				

Page 13 of 105 CSR Limited



Sched	Condition	Condition Text	Condition Text				
		The Proponent must not exceed the total truck movements detailed in Table 2.  Table 2: Total Truck Movements					
		Transport Route Stage	Project Phases	Day	Total truck movements <sup>a</sup>		
				Monday to Friday	120		
		Prior to the upgrade of the Martin Road- Elizabeth Drive Intersection	1,2 and 3	Saturday	40	_	
				Sundays	40		
2	12		1,2 and 3	Monday to Friday	800		ТМР
				Saturday	358		
		Following completion of the Martin Road- Elizabeth Drive Intersection upgrade		Sundays	200	-	TMP
			4	Monday to Friday	366		
				Saturday	98		
				Sunday	0		
		<sup>a</sup> Note: each truck entering or exiting the site is o					
2	12A	Truck movements entering or exiting the site on Sundays are restricted to the importation of VENM for the purpose of backfilling quarry pits and rehabilitation activities.  Note: Truck movements are also controlled further by the limits in condition 10 of this Schedule and operating hours in					TMP
2	STRIICTUR	condition 1 of Schedule 3.  AL ADEQUACY					
2	13	All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the project, must be constructed in accordance with the BCA.  Notes:  Under Part 6 of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for any proposed building works;  Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.					6.2

Page 14 of 105 CSR Limited



Sched	Condition	Condition Text	Where covered		
2	DEMOLITION	ON			
2	14	All demolition work must be carried out in accordance with the Australian Standard AS 2601-2001: The Demolition of Structures (Standards Australia, 2001).			
2	PROTECTION	ON OF PUBLIC INFRASTRUCTURE			
2	15	Unless the Proponent and the applicable authority agree otherwise the Proponent must:  (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and  (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.  Note: This condition does not apply to damage to roads caused as a result of general road usage or otherwise addressed by contributions required by condition 25 of Schedule 3.	ТМР		
2	OPERATIO	N OF PLANT AND EQUIPMENT			
2	All plant and equipment used on the site, or to monitor the performance of the project, must be:  (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.		6.3		
2	16A	The external walls of all buildings including additions to existing buildings must comply with the relevant requirements of the BCA. Before the issue of a Construction Certificate and an Occupation Certificate, the Proponent must provide the Certifying Authority with documented evidence that the products and systems proposed for use or used in the construction of external walls, including finishes and claddings such as synthetic or aluminium composite panels, comply with the requirements of the BCA. The Proponent must provide a copy of the documentation given to the Certifying Authority to the Secretary within seven days after the Certifying Authority accepts it.	Noted		
2	LIMITS OF E	XXTRACTION			
2		Identification of Approved Extraction Limits			
2	18	Within 3 months of the determination of Modification 3 and 4, the Proponent must:  (a) engage a registered surveyor to mark out the boundary of the approved area of extraction within Pit 3; and  (b) provide the Secretary with a survey plan of the boundary.  The boundary of the approved area of extraction within Pit 3 must be clearly marked in a manner that allows them to be easily identified at all times during the carrying out of quarrying operations.	6.3.1		

Page 15 of 105 CSR Limited



Sched	Condition	Condition Text	Where covered		
2		Maximum Extraction Depth			
2	19	The Proponent must not extract any extractive materials or carry out any work in the extraction area below 35 m below the pre-existing natural surface of the ground, other than construction of bores approved by DPIE Water or in-pit sumps approved by the Secretary.			
3	SPECIFIC EN	IVIRONMENTAL CONDITIONS			
3	NOISE				
3	Hours of C	Operation			
3	1	The Proponent must comply with the operating hours set out in Table 1.	NMP		
3	1A	With the written agreement of the Secretary, the Proponent may undertake limited campaign trucking (within the limits imposed under conditions 10 and 12 of Schedule 2) for the import of VENM outside of the operating hours prescribed in condition 1 of this Schedule.	NMP		
3	2	The following activities may be carried out outside the hours specified in condition 1 of this Schedule:  (a) activities that are inaudible at residences on privately-owned land;  (b) the delivery or dispatch of materials as requested by the NSW Police Force or other public authorities for safety reasons; or  (c) emergency work to avoid the loss of life, property or to prevent material harm to the environment.  In such circumstances, the Proponent must notify the Department and affected residents prior to undertaking the activities, or as soon as is practical thereafter.	9.6.1		
3	Construction	on Noise			
3	3	Approved construction works must only be undertaken during standard construction hours (7 am to 6 pm, Monday to Friday and 8 am to 1 pm on Saturdays), unless the Secretary agrees otherwise.	NMP		
3	5	Operational Noise Criteria  The Proponent must ensure that operational noise generated by the project (including construction activities) does not exceed the criteria in Table 2 at any residence on privately-owned land. Noise generated by the project must be monitored and measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Noise Policy for Industry (NSW EPA 2017).  However, the noise criteria in Table 2 do not apply if the Proponent has an agreement with the relevant landowner to exceed the noise criteria, and the Proponent has advised the Department in writing of the terms of this agreement.  Note: should an agreement with a landowner be terminated for any reason, the Proponent must comply with the noise criteria in Table 2.	7.2.2, NMP		
Sched	Condition	Condition Text	Where covered		

Page 16 of 105 CSR Limited



3		Road Traffic Noise Criteria	
3	6	The Proponent must ensure that the road traffic noise generated by the project does not exceed the criteria in Table 3 at any privately-owned residence.  Traffic noise generated by the project is to be measured in accordance with the relevant procedures in the NSW Road Noise Policy (Department of Environment, Climate Change and Water NSW). However, the noise criteria in Table 3, do not apply if the Proponent has an agreement with the relevant landowner to exceed the noise criteria, and the proponent has advised the Department in writing of the terms of this agreement.	7.2.2, NMP
3	6A	Upon receiving a written request from the owner of residences RN5, RN9, RN14, RN16, RN21 or RN22, the Proponent must implement noise mitigation treatment packages as described in the EA (Mod 3 and 4) and as set out in the RMS Draft At-Receiver Treatment Packages.  If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.	NMP
3		Noise Operating Conditions	
3	7	<ul> <li>The Proponent must: <ul> <li>(a) take all reasonable steps to minimise the construction, operational, low frequency and road transportation noise of the project;</li> <li>(b) take all reasonable steps to minimise the noise impacts of the project during noise enhancing meteorological conditions;</li> <li>(c) operate a noise management system to guide the day to day planning of quarrying operations and the implementation of noise mitigation measures to ensure compliance with the relevant conditions of this approval;</li> <li>(d) carry out regular noise monitoring to determine whether the project is complying with the relevant conditions of this approval; and</li> <li>(e) modify or stop operations on the site to comply with the relevant conditions of this approval.</li> </ul> </li> <li>Note: Monitoring under this approval is not required at all residences and the use of representative monitoring locations can be used to demonstrate compliance with criteria, if agreed to by the Secretary.</li> </ul>	NMP
Sched	Condition	Condition Text	Where covered

Page 17 of 105 CSR Limited



3		Noise Management Plan	
3	8	The Proponent must prepare a Noise Management Plan for the project to the satisfaction of the Secretary. This plan must:  (a) be submitted to the Secretary for approval prior to commencing Modification 3 and 4, unless otherwise agreed by the Secretary;  (b) describe the measures to be implemented to ensure:  • compliance with the noise criteria and operating conditions of this approval;  • best practice management is being employed;  • residences listed in condition 6A of this Schedule are notified of their rights to request road noise mitigation measures;  • vibration impacts are minimised; and  • the construction and operational noise impacts of the project are minimised during noise enhancing meteorological conditions;  (c) describe measures to ensure that all the commitments in the EA (Mod 3 and 4) in relation to noise are implemented;  (d) include a consultation plan detailing:  • procedures for notifying and consulting nearby residents prior to the recommencement of quarrying and brick making activities;  • procedures for notifying and consulting nearby residents prior to the commencement of construction activities;  • procedures for notifying and consulting nearby residents prior to the commencement of construction activities;  • procedures for notifying and consulting nearby residents prior to the commencement of construction activities;  • procedures for handling and monitoring all complaints received; and  • contingency measures that would be implemented where complaints are received;  (d) describe the proposed noise management system; and  (include a noise monitoring program that:  • is capable of evaluating the performance of the project;  • includes a protocol for determining any exceedances of the relevant conditions of this approval; and  • effectively supports the noise management system.  The Proponent must implement the Noise Management Plan as approved by the Secretary.	NMP
3	AIR QUALI	TY	
3		Air Quality Impact Assessment Criteria	
3	9	The Proponent must ensure that particulate matter emissions generated by the project do not cause exceedances of the criteria in Table 4 at any residence on privately-owned land.	7.2.2, AQMP
Sched	Condition	Condition Text	Where covered

Page 18 of 105 CSR Limited



3	Operating Conditions	
3 10	The Proponent must:  (a) implement best practice management to minimise the dust emissions of the project; (b) implement all air quality management and mitigation measures that were committed to in the EA (Mod 3 and 4); (c) implement real-time monitoring of 24-hour average PM10 and meteorological conditions; (d) regularly assess meteorological and air quality monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the air quality criteria in this approval; (e) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d under Table 4); (f) monitor and report on compliance with the relevant air quality conditions in this approval; and (g) minimise the area of surface disturbance and undertake progressive rehabilitation of the site, to the satisfaction of the Secretary.	AQMP
3	Air Quality Management Plan	
3 13	The Proponent must prepare an Air Quality Management Plan for the project to the satisfaction of the Secretary. This plan must:  (a) be prepared in consultation with relevant WSA authorities; (b) be submitted to the Secretary for approval prior to commencing Phase 1, unless otherwise agreed by the Secretary; (c) describe the proposed air quality management system; (d) describe the measures to be implemented to ensure:  • compliance with the air quality criteria and operating conditions of this approval; • best practice management is being employed; and • the air quality impacts of the project are minimised during adverse meteorological conditions and extraordinary events; (e) describe measures to ensure that all the commitments in the EA (Mod 3 and 4) in relation to air quality are implemented; (f) include a program to ensure surface disturbance associated with quarrying operations is minimised; (g) include an air quality monitoring program that:  • is capable of evaluating the performance of the project and informing day to day operational decisions; • includes a protocol for determining any exceedances of the relevant conditions of this approval; and • effectively supports the air quality management system; and (h) include a program to: • notify affected landowners of the potential health-related impacts associated with dust; • respond effectively to enquiries or complaints.  The Proponent must implement the Air Quality Management Plan as approved by the Secretary.	AQMP

Page 19 of 105 CSR Limited



Sched	Condition	Condition Text	Where covered
3		Meteorological Monitoring	
3	14	For the life of the project, the Proponent must ensure that there is a suitable meteorological station operating in the vicinity of the site that complies with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales guideline and is capable of measuring meteorological conditions in accordance with the NSW Noise Policy for Industry (EPA, 2017).	AQMP
3		Odour	
3	15	The Proponent must ensure that no offensive odours, as defined by the POEO Act, are emitted from the site.	AQMP
3		Greenhouse Gas Emissions	
3	16	The Proponent must implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site.	AQMP
3		SOIL AND WATER	
3		Water Supply	
3	17	The Proponent must ensure that it has sufficient water for all stages of the project, and if necessary, adjust the scale of operations under the approval to match its available water supply, to the satisfaction of the Secretary.	SWMP
3	17A	The Proponent must report on water extracted from the site each year (direct and indirect) in the Annual Review, including water taken under each water licence.	8.1
3		Water Discharges	
3	18	The Proponent must ensure that all quarry water from the site is contained wholly within the site except where otherwise authorised by condition 19 and 19A of this Schedule.	SWMP
3	19	The Proponent must ensure that all surface water discharges from the site comply with the limits (both volume and quality) set in any EPL applicable to the site	SWMP
		Dewatering of Pits 1, 2 and 3	DWMP
3	19A	All water that is dewatered from Pit 1 (including any water transferred into Pit 1 from Pit 2 and Pit 3) must be transferred from the site in accordance with the Dewatering Management Plan required under Condition 23A of this Schedule.	
3	19B	All dewatering activities from Pit 1 must be completed within Phase 1 unless otherwise agreed by the Secretary.	DWMP
3		Riparian Buffer Distance	

Page 20 of 105 CSR Limited



Sched	Condition	Condition Text	Where covered
3	20	The Proponent must maintain a minimum setback width of 60 metres (measured from the top of bank) between extraction areas and both Badgerys Creek and Badgerys Creek tributary.  Note: This condition does not prohibit overburden emplacement or rehabilitation works in accordance with the Project Layout Plan.	SWMP
3		Alluvial Aquifers	
3	21	The Proponent must ensure that the project has no impact on alluvial aquifers associated with South Creek, Badgerys Creek or their tributaries.	SWMP
3		Soil and Water Management Plan	
3	23	The Proponent must prepare a Soil and Water Management Plan for the project to the satisfaction of the Secretary. This plan must:  (a) be prepared by a suitably qualified and experienced person/s approved by the Secretary;  (b) be prepared in consultation with Council and DPIE-Water;  (c) be submitted to the Secretary for approval prior to commencing Phase 1, unless otherwise agreed by the Secretary; and	SWMP
3	23	<ul> <li>(d) include a:</li> <li>(i) Site Water Balance that includes:</li> <li>details of:  - sources and security of water supply;  - water use and management on site;  - adequacy of water storage facilities to contain all surface water runoff;</li> <li>all existing Water Access Licences and potential Water Access Licences, including information on the relevant Water Sharing Plan and Water Sources;</li> <li>any off-site water transfers, including those described in condition 23A of this Schedule; and</li> <li>reporting procedures; and</li> <li>measures to be implemented to minimise clean water use on site;</li> </ul>	SWMP
3	23	<ul> <li>(ii) Surface Water Management Plan, that includes:         <ul> <li>a program for obtaining detailed baseline data on surface water flows and quality in water bodies that could potentially be affected by the project;</li> </ul> </li> </ul>	SWMP
3	23	<ul> <li>a detailed description of the surface water management system on site including the:</li> <li>clean water diversion system; o erosion and sediment controls; o dirty water management system; and</li> <li>water storages, including the area, depth and capacity of any in-pit sumps;</li> </ul>	SWMP

Page 21 of 105 CSR Limited



Sched	Condition	Condition Text	Where covered
3	23	<ul> <li>detailed plans, including design objectives and performance criteria, for: o reinstatement of drainage lines on the rehabilitated areas of the site; and o control of any potential water pollution from rehabilitated areas of the site;</li> </ul>	SWMP
3	23	<ul> <li>performance criteria for the following, including trigger levels for investigating any potentially adverse impacts on:         <ul> <li>the water management system;</li> <li>surface water quality in creeks and other water bodies that could potentially affected by the project (including Badgerys Creek and Badgerys Creek tributary); and</li> <li>the stream health, vegetation health and channel stability of water bodies that could potentially affected by the project;</li> </ul> </li> </ul>	SWMP
3	23	<ul> <li>a program to monitor and report on:         <ul> <li>any surface water discharges;</li> <li>the effectiveness of the water management system;</li> <li>the quality of water discharged from the site to the environment;</li> <li>surface water flows and quality in local watercourses; and</li> <li>the stream health, riparian vegetation health and channel stability of creeks and other water bodies that could potentially be affected by the project; and</li> </ul> </li> </ul>	SWMP
3	23	<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>	SWMP
3	23	<ul> <li>(iii) Groundwater Management Plan that includes:         <ul> <li>measures to ensure that the maximum extraction depth is not exceeded (see condition 19 of Schedule 2);</li> <li>a protocol to obtain appropriate water licence(s) to cover the volume of any unforeseen groundwater inflows into the quarry from the quarry face or floor;</li> <li>groundwater assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts; and</li> <li>a monitoring program to manage potential impacts, if any, on any alluvium and associated surface water source near the proposed extraction area that includes:</li></ul></li></ul>	SWMP

Page 22 of 105 CSR Limited



		<ul> <li>a plan to respond to any exceedances of the performance criteria; and</li> </ul>	
		<ul> <li>a program to regularly report on monitoring.</li> </ul>	
		The Proponent must implement the Soil and Water Management Plan as approved by the Secretary.	
3	23A	Dewatering Infrastructure Plan	
3	23A	Prior to carrying out any construction activities associated with the dewatering activities on the site, the Proponent must prepare a Dewatering Infrastructure Plan for the project to the satisfaction of the Secretary. This plan must include:  (a) detailed designs for:  • any pipeline infrastructure used for dewatering activities; and  • the method to be used to cross Badgerys Creek;  (b) a flooding assessment which:  • considers the impacts of any structures (including overland pipelines) to flood flow within the floodplain up to the PMF; and  • describes the measures that will be implemented to minimise those impacts; and  (c) a description of the measures to be implemented for:  • managing construction and operation of minor surface infrastructure;  • avoiding significant impacts and minimisation of impacts generally;  • controlling any potential water pollution from construction;  • minimising and managing erosion and sedimentation;  • decommissioning of pipeline infrastructure; and  • rehabilitating disturbed areas.  The Proponent must implement the Dewatering Infrastructure Plan as approved by the Secretary.	DWIP
3	23B	Dewatering Management Plan	
		The Proponent must prepare a Dewatering Management Plan for the project to the satisfaction of the Secretary. This plan must:  (a) be prepared in consultation with DPIE-Water and NRAR;  (b) be submitted to the Secretary for approval prior to dewatering activities from Pit 1, unless otherwise agreed by the Secretary; and  (c) include:  • details of:  - off-site water transfer or discharge arrangements; and  - procedures for monitoring on volumes transferred off-site and reporting on this as part of AEMR;  • a Fauna Relocation Plan regarding the transfer of aquatic fauna from Pits 1, 2 and 3 prepared by a suitably qualified ecologist which includes details on:	DWMP

Page 23 of 105 CSR Limited



Page 24 of 105 CSR Limited



3	3		Monitoring of Product Transport	
25   (b)   annual road maintenance contributions to be paid to Council, based on the weight of all laden truck movements to and from the site, for the duration that Martin Road is vested in the Council as the roads authority.    The Proponent must provide evidence to the Secretary that the agreement has been executed and implemented to the satisfaction of Council.    If there is any dispute between the Proponent and Council, then either of the parties may refer the matter to the Secretary for resolution    Prior to increasing truck movement limits as specified in condition 12 of Schedule 2, the Proponent must complete an interim upgrade of the Martin Road and Elizabeth Drive Intersection. The final design of intersection must be to the satisfaction of the relevant roads authority/s and must:	Sched	Condition	Condition Text	Where covered
(b) annual road maintenance contributions to be paid to Council, based on the weight of all laden truck movements to and from the site, for the duration that Martin Road is vested in the Council as the roads authority.  The Proponent must provide evidence to the Secretary that the agreement has been executed and implemented to the satisfaction of Council.  If there is any dispute between the Proponent and Council, then either of the parties may refer the matter to the Secretary for resolution  Prior to increasing truck movement limits as specified in condition 12 of Schedule 2, the Proponent must complete an interim upgrade of the Martin Road and Elizabeth Drive Intersection. The final design of intersection must be to the satisfaction of the relevant roads authority/s and must:  (a) be designed and constructed in accordance with Austroads Guidelines, Australian Standards and any requirements of the relevant road authority/s;  (b) include, at a minimum, a three phase signal operation including a right turn green light and pedestrian crossings on one Martin Road and one Elizabeth Drive approach;  (c) be subject to a Works Authorisation Deed (WAD) with TfNSW; and  (d) be funded by the Proponent, unless otherwise agreed with TfNSW.  With the written agreement of the Secretary, the requirements of condition 25A of this Schedule may be waived if the Proponent can demonstrate that the Martin Road-Elizabeth Drive Intersection has been upgraded to achieve service, capacity	3	25C	site (as conceptually shown in Appendix 3). The final design and location of the transport corridor and any associated commercial arrangements must be determined in consultation with TfNSW.  The Proponent must advise the Secretary in writing of the final design and location of the transport corridor as agreed with	Noted
(b) annual road maintenance contributions to be paid to Council, based on the weight of all laden truck movements to and from the site, for the duration that Martin Road is vested in the Council as the roads authority.  The Proponent must provide evidence to the Secretary that the agreement has been executed and implemented to the satisfaction of Council.  If there is any dispute between the Proponent and Council, then either of the parties may refer the matter to the Secretary for resolution  Prior to increasing truck movement limits as specified in condition 12 of Schedule 2, the Proponent must complete an interim upgrade of the Martin Road and Elizabeth Drive Intersection. The final design of intersection must be to the satisfaction of the relevant roads authority/s and must:  (a) be designed and constructed in accordance with Austroads Guidelines, Australian Standards and any requirements of the relevant road authority/s;  (b) include, at a minimum, a three phase signal operation including a right turn green light and pedestrian crossings on one Martin Road and one Elizabeth Drive approach;  (c) be subject to a Works Authorisation Deed (WAD) with TfNSW; and	3	25B	Proponent can demonstrate that the Martin Road-Elizabeth Drive Intersection has been upgraded to achieve service, capacity	Noted
(b) annual road maintenance contributions to be paid to Council, based on the weight of all laden truck movements to and from the site, for the duration that Martin Road is vested in the Council as the roads authority.  The Proponent must provide evidence to the Secretary that the agreement has been executed and implemented to the satisfaction of Council.  If there is any dispute between the Proponent and Council, then either of the parties may refer the matter to the Secretary for	3	25A	<ul> <li>upgrade of the Martin Road and Elizabeth Drive Intersection. The final design of intersection must be to the satisfaction of the relevant roads authority/s and must: <ul> <li>(a) be designed and constructed in accordance with Austroads Guidelines, Australian Standards and any requirements of the relevant road authority/s;</li> <li>(b) include, at a minimum, a three phase signal operation including a right turn green light and pedestrian crossings on one Martin Road and one Elizabeth Drive approach;</li> <li>(c) be subject to a Works Authorisation Deed (WAD) with TfNSW; and</li> </ul> </li> </ul>	ТМР
Prior to the recommencement of quarrying operations, the Proponent must enter into a formal agreement with Council for:	3	25	<ul> <li>(a) the repair of historical impacts of trucking from the project on Martin Road; and</li> <li>(b) annual road maintenance contributions to be paid to Council, based on the weight of all laden truck movements to and from the site, for the duration that Martin Road is vested in the Council as the roads authority.</li> <li>The Proponent must provide evidence to the Secretary that the agreement has been executed and implemented to the satisfaction of Council.</li> <li>If there is any dispute between the Proponent and Council, then either of the parties may refer the matter to the Secretary for</li> </ul>	ТМР

Page 25 of 105 CSR Limited



Page 26 of 105 CSR Limited



3	29	<ul> <li>The Proponent must ensure that:</li> <li>(a) archaeological salvage of site BC-01-09 is undertaken in accordance with Recommendation 1, Section 6.0 of the Aboriginal Heritage Assessment – Addendum in the EA;</li> <li>(b) regeneration works, dewatering activities and water discharges in the area of the archaeological deposit identified adjacent to Badgerys Creek (see Appendix 5) are either avoided, or else undertaken in a manner that will minimise harm to Aboriginal objects, to the satisfaction of the Secretary; and</li> <li>(c) measures are implemented prior to the commencement of Phase 1, to conserve and protect the hearth feature within site BCBW18 AS 02 02 (AHIMS ID 45-5-5164).</li> </ul>	АНМР
3	30	The Proponent must prepare an Aboriginal Heritage Management Plan for the project to the satisfaction of the Secretary. The plan must:  (a) be prepared by suitably qualified and experienced persons; (b) be prepared in consultation with Registered Aboriginal Parties and Heritage NSW; (c) be submitted to the Secretary for approval within 6 months of the determination of Modification 3 and 4, unless otherwise agreed by the Secretary; (d) include a description of the measures that would be implemented to:  i protect, monitor and manage identified Aboriginal objects and Aboriginal places on the site (including any proposed archaeological investigations and salvage measures), including specific measures to ensure that the archaeological deposit adjacent to Badgerys Creek (see Appendix 5) is not impacted during regeneration operations;  ii conserve the entire extent of the hearth feature within site BCBW18 AS 02 (AHIMS ID 45-5-5164);  iii manage the discovery of previously unidentified Aboriginal objects or Aboriginal places on the site; and  iv facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage on the site; and  (e) include a protocol to be implemented in the event that skeletal remains are discovered during the project.	АНМР
3	31	If human remains are discovered on the site, then all work in the area surrounding the discovery must cease, and the area must be secured. The Proponent must immediately notify NSW Police Force and Heritage NSW, and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.	АНМР
3	32	If any potential Aboriginal object or Aboriginal place is identified on the site, or suspected to be on the site:  (a) all work in the immediate vicinity of the object or place must cease immediately;  (b) a 10 m buffer area around the object or place must be cordoned off; and  (c) Heritage NSW must be contacted immediately.	АНМР
Sched	Condition	Condition Text	Where covered

Page 27 of 105 CSR Limited



3	33	<ul> <li>Work in the immediate vicinity of a site identified in condition 32 of this Schedule may only recommence if:</li> <li>(a) the object or place is confirmed by Heritage NSW upon consultation with the Registered Aboriginal Parties not to be an Aboriginal object or Aboriginal Place;</li> <li>(b) the Aboriginal Cultural Heritage Management Plan is revised to include the object or place and appropriate measures in respect of it; or</li> <li>(c) the Secretary is satisfied with the measures to be implemented in respect of the object or place and makes a written direction in that regard.</li> </ul>	АНМР
3	REHABILITA		
3		Rehabilitation Objectives	
3	34	The Proponent must rehabilitate the site in accordance with the conditions imposed on the mining lease(s) associated with the project under the Mining Act 1992. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA (Mod 3 and 4) and shown in Appendix 4, and must comply with the objectives in Table 5.	6.3.2, RMP
3		Progressive Rehabilitation	
3	35	The Proponent must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable measures must be taken to minimise the total area exposed for dust generation at any time. Interim stabilisation measures must be implemented where reasonable and feasible to control dust emissions in disturbed areas that are not active and which are not ready for final rehabilitation.  Note: It is accepted that parts of the site that are progressively rehabilitated may be subject to future re-disturbance	RMP
3	35A	The Proponent must complete the backfilling of Pits 1 and 2 within 6 years of commencement of Phase 1, or as otherwise agreed by the Secretary.	RMP
3	35B	The Proponent must complete the backfilling of Pit 3 within 2 years of the date of completion of extraction activities in Pit 3, or as otherwise agreed by the Secretary.	RMP
3		Rehabilitation Management Plan	
з	36	<ul> <li>The Proponent must prepare a Rehabilitation Management Plan for the project, in accordance with the conditions imposed on the mining lease(s) associated with the project under the Mining Act 1992. This plan must: <ul> <li>(a) be prepared in consultation with the Department, DPIE Water, BCD, TfNSW, relevant WSA authorities and Council;</li> <li>(b) build upon the Rehabilitation Objectives in Table 5 and the proposed rehabilitation strategy described in the EA (Mod 3 and 4) and shown in Appendix 4;</li> <li>(c) investigate options for the future use of disturbed areas following the completion of backfilling operations, having regards to the strategic planning associated with the draft Western Sydney Aerotropolis Plan (or subsequently adopted NSW Government strategic plans);</li> <li>(d) describe and justify the proposed rehabilitation strategy for the site, including the landform and use of the site following the completion of quarry operations;</li> <li>(e) include details of the planting of replacement trees in riparian areas consistent with the Statement of Commitments and with vegetation requirements for WSA to minimise wildlife impacts;</li> </ul> </li> </ul>	RMP

Page 28 of 105 CSR Limited



Page 29 of 105 CSR Limited



3	37D	<ul> <li>(b) is designed in accordance with any Civil Aviation Safety Authority requirements for the WSA and is mounted, screened and directed in such a manner that it does not cause distraction or confusion to pilots due to light spill above the horizontal plane.</li> <li>Visual Impact Management Plan</li> <li>Within 6 months of approval of Modification 3 and 4, the Proponent must prepare a Visual Impact Management Plan for the project to the satisfaction of the Secretary. This plan must: <ul> <li>(a) be prepared by a suitably qualified and experienced person/s;</li> <li>(b) be prepared in consultation with Council, TfNSW and relevant WSA authorities;</li> <li>(c) describe the measures to be implemented to minimise the visual, landscaping and off-site lighting impacts of the project to the WSA and surrounding community;</li> <li>(d) include a landscaping strategy to shield public views of the project (including views from the Eastern Airport Ring Road) that includes: <ul> <li>the measures identified in the EA (Mod 3 and 4);</li> <li>a vegetation strategy utilising a diversity of local provenance tree species from the native vegetation community (or communities) that occur or once occurred on the site, and would minimise wildlife attraction;</li> <li>a bund vegetation and maintenance schedule; and</li> <li>procedures to notify, consult with and implement site-specific mitigation measures at affected privately-owned residences;</li> <li>(e) include a program to monitor and report on the implementation and effectiveness of the mitigation measures; and</li> <li>include a protocol to update the plan to include the requirements of condition 37A and 37B of this Schedule, once the Secretary has been advised of the confirmed Eastern Airport Ring Road alignment as required under condition 35C of</li> </ul> </li> </ul></li></ul>	VIMP
3	WASTE		
3	38	<ul> <li>The Proponent must: <ul> <li>(a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Council;</li> <li>(b) minimise the waste generated by the project;</li> <li>(c) ensure that the waste generated by the project is appropriately stored, handled, and disposed of; and</li> <li>(d) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary. <ul> <li>Note: Approval pursuant to Section 68 of the Local Government Act 1993 is required from Council for onsite sewage management systems.</li> </ul> </li> </ul></li></ul>	WMP

Page 30 of 105 CSR Limited



3	39	Except as expressly permitted in an EPL and/or the conditions of this approval, the Proponent must not receive waste on the site for storage, treatment, processing, reprocessing or disposal.	WMP
3	39A	VENM Management Plan	
		Prior to the import of VENM to the site, the Proponent must prepare a VENM Management Plan for the project to the satisfaction of the Secretary. This plan must:  (a) identify the quantities of VENM to be imported to site; (b) describe:  • the procedures for monitoring VENM imported to the site to ensure that it meets relevant quality specifications for VENM;  • management measures for the emplacement and temporary stockpiling of VENM;  • the process for handling VENM for use in rehabilitation;  • measures for the on-site use of water captured in sediment basins to ensure that the water does not present a contamination risk; and  • processes for assessing, recording, handling and managing any contamination found on the site; and (c) provide an indicative schedule of VENM material to be imported to the site for each Phase of the project, in order to achieve the conceptual final landform.  The Proponent must implement the VENM Management Plan as approved by the Secretary.	VMP
3	LIQUID ST		
3	40	The Proponent must ensure that all tanks and similar storage facilities (other than for water) are protected by appropriate bunding or other containment, in accordance with the relevant Australian Standards.	Section 6.2
3	DANGERO	US GOODS	
3	41	The Proponent must ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant Australian Standards, particularly AS1940 and AS1596, and the Dangerous Goods Code.	Section 6.2
3	FIRE SAFETY		
3	42	The Proponent must: <ul> <li>(a) ensure that the project is suitably equipped to respond to any fires on site; and</li> <li>(b) assist the emergency services to the extent practicable if there is a fire in the vicinity of the site.</li> <li>(c) ensure that the project provides for asset protection in accordance with the relevant requirements in Planning for Bushfire Protection 2019 (NSW RFS 2019).</li> </ul>	EMRP
Sched	Condition	Condition Text	Where covered
4	ADDITIONA	AL PROCEDURES	

Page 31 of 105 CSR Limited



4		NOTIFICATION OF LANDOWNERS	
4	1	As soon as practicable, and no longer than 7 days, after obtaining monitoring results showing:  (a) an exceedance of any criteria in Schedule 3, the Proponent must notify the affected landowners in writing of the exceedance, and provide regular monitoring results, at least every 3 months, to each affected landowner until the project is again complying with the relevant criteria; and	9.2
4		(b) an exceedance of any 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 current tenants of the land (including the tenants of land which is not privately-owned).	9.2
4		INDEPENDENT REVIEW	
4	2	If a landowner considers the project to be exceeding the relevant criteria in Schedule 3, they may ask the Secretary in writing for an independent review of the impacts of the project on their land.  If the Secretary is not satisfied that an independent review is warranted, the Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.  If the Secretary is satisfied that an independent review is warranted, within 3 months, or as otherwise agreed by the Secretary and the landowner, of the Secretary's decision, the Proponent must:  (a) commission a suitably qualified, experienced and independent person, 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 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.	9.3
5	ENVIRONN	IENTAL MANAGEMENT, REPORTING AND AUDITING	
5	1	The Proponent must prepare an Environmental Management Strategy for the project to the satisfaction of the Secretary. This strategy must:  (a) be submitted to the Secretary for approval within 6 months of the determination of Modification 3 and 4, unless otherwise agreed by the Secretary;  (b) provide the strategic framework for environmental management of the project;  (c) identify the statutory approvals that apply to the project;  (d) set out the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;  (e) set out the procedures to be implemented to:	Refer to table in Section 1.1

Page 32 of 105 CSR Limited



		<ul> <li>keep the local community and relevant agencies informed about the operation and environmental performance of the project;</li> <li>receive, record, handle and respond to complaints;</li> <li>resolve any disputes that may arise during the course of the project;</li> </ul>	
		<ul> <li>respond to any non-compliance and any incident; and</li> <li>respond to emergencies; and</li> <li>include:</li> <li>references to any strategies, plans and programs approved under the conditions of this approval; and</li> <li>a clear plan depicting all the monitoring to be carried out under the conditions of this approval.</li> </ul>	
		The Proponent must implement any Environmental Management Strategy as approved by the Secretary.	
5		Evidence of Consultation	
5	2	<ul> <li>Where the conditions of this approval require consultation with an identified party, the Proponent must: <ul> <li>(a) consult with the relevant party prior to submitting the subject document to the Secretary for approval; and</li> <li>(b) provide details of the consultation undertaken, including: <ul> <li>the outcome of that consultation, matters resolved and unresolved; and</li> </ul> </li> <li>details of any disagreement remaining between the party consulted and the Proponent and how the Proponent has addressed any unresolved matters.</li> <li>However, if the Secretary agrees, a strategy, plan or program may be prepared without consultation being undertaken with an identified party required under a condition of this approval.</li> </ul> </li> </ul>	6.0 and within each management plan
Sched	Condition	Condition Text	Where covered
5	3	<ul> <li>Management Plan Requirements</li> <li>The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include: <ul> <li>(a) a summary of relevant background or baseline data;</li> <li>(b) a description of:</li> <li>the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>any relevant limits or performance measures/criteria; and</li> <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> </li> </ul>	6.0 and within each management plan

Page 33 of 105 CSR Limited



5		<ul> <li>(c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</li> <li>(d) a program to monitor and report on the:</li> <li>impacts and environmental performance of the project; and</li> <li>effectiveness of any management measures (see (c) above);</li> </ul>	Within each management plan
5		<ul> <li>(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;</li> <li>(f) a program to investigate and implement ways to improve the environmental performance of the project over time;</li> </ul>	Within each management plan
		<ul> <li>(g) a protocol for managing and reporting any:</li> <li>incidents;</li> <li>complaints; and</li> <li>non-compliances with statutory requirements;</li> </ul>	Within each management plan
5		<ul> <li>(h) a protocol for periodic review of the plan; and</li> <li>(i) a document control table that includes version numbers, dates when the management plan was prepared and reviewed, names and positions of the person/s who prepared and reviewed the management plan, a description of any revisions made and the date of the Secretary's approval.</li> </ul>	Within each management plan
5		Application of Existing Strategies, Plans and Programs	
5	4	The Proponent must continue to apply existing management plans, strategies or monitoring programs approved prior to the approval of Modification 3 and 4, until the approval of a similar plan, strategy or program following the approval of Modification 3 and 4.	Noted
5		Revision of Strategies, Plans & Programs	
Sched	Condition	Condition Text	Where covered
5	5	Within 3 months of:  (a) the submission of an incident report under condition 10 below; (b) the submission of an Annual Review under condition 12 below; (c) the submission of an Independent Environmental Audit report under condition 14 below; and (d) the approval any modifications to this approval, the Proponent must review the suitability of all strategies, plans and programs required under this approval, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.  Notes:  * The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.  * In the event of an inconsistency between condition 5(d) above and any condition in Schedule 3 of this approval, the latter prevails.	8.2

Page 34 of 105 CSR Limited



5		Updating and Staging of Strategies, Plans or Programs	
5	6	<ul> <li>With the approval of the Secretary, the Proponent may:</li> <li>(a) prepare and submit any strategy, plan or program required by this approval on a staged basis (if a clear description is provided as to the specific stage and scope of the project to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program);</li> <li>(b) combine any strategy, plan or program required by this approval (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined); and</li> <li>(c) update any strategy, plan or program required by this approval (to ensure the strategies, plans and programs required under this approval are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the project).</li> </ul>	Noted Section 2.2
5		Adaptive Management	
5	7	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.	2.5
5		Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must as soon as becoming aware of any exceedance:  (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not reoccur;  (b) consider all reasonable and feasible options for remediation (where relevant);  (c) within 14 days of the exceedance occurring, submit a report to the Secretary describing these remediation options and any preferred remediation measures or other course of action; and  (d) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.	9.0
5		COMMUNITY CONSULTATIVE COMMITTEE	

Sched	Condition	Condition Text	Where covered	l
-------	-----------	----------------	---------------	---

Page 35 of 105 CSR Limited



5	8	The Proponent must establish and operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Secretary. The CCC must be established prior to recommencing quarrying operations and be operated in general accordance with the Department's Community Consultative Committee Guidelines, November 2016 (or later version).	ССР
5		<ul> <li>Notes</li> <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 guidelines, the Committee should comprise an independent chair and appropriate representation from the Proponent, Council and the local community.</li> <li>The Proponent may, with the approval of the Secretary, combine the function of this CCC with the functions of other CCCs in the area.</li> </ul>	
5	REPORTIN	G	
5		Incident Reporting	
5	9	The Proponent must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be made in writing through the Department's Major Projects Website and identify the project (including the development application number and name) and set out the location and nature of the incident.	9.2
5	10	Non-Compliance Notification  Within seven days of becoming aware of a non-compliance, the Proponent must notify the Department of the non-compliance. The notification must be made in writing through the Department's Major Projects website and identify the project (including the development application number and name), set out the condition of this approval that the project is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.  Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	9.2
5		Regular Reporting	
5	11	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.	9.1.4
5		Annual Review	
Sched	Condition	Condition Text	Where covered

Page 36 of 105 CSR Limited



5	12	Prior to recommencing quarrying operations or VENM import, and annually thereafter, the Proponent must submit a review to the Department reviewing the environmental performance of the project to the satisfaction of the Secretary. This review must:  (a) describe the project (including any progressive rehabilitation) that was carried out in the previous calendar year, and the project that is proposed to be carried out over the current calendar year;  (b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against the:  • relevant statutory requirements, limits or performance measures/criteria;  • requirements of any plan or program required under this approval;  • monitoring results of previous years; and  • relevant predictions in the documents listed in condition 3 of Schedule 2;	8.1
5		<ul> <li>(c) evaluate and report on: <ul> <li>the effectiveness of the air quality and noise management systems; and</li> <li>compliance with the performance measures, criteria and operating conditions in this approval.</li> </ul> </li> <li>(d) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence: <ul> <li>identify any trends in the monitoring data over the life of the project;</li> <li>identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and</li> <li>(g) describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.</li> </ul> </li> </ul>	8.1
5		The Proponent must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 8 of Schedule 5) and any interested person upon request.	8.1
5	INDEPEND	DENT ENVIRONMENTAL AUDIT	
5	13	Within 12 months of the commencement of Phase 1, 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:  (a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies and the CCC; (c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or necessary water licences for the project (including any assessment, strategy, plan or program required under these approvals); (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;	9.4.1
5		(e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and	9.4.1

Page 37 of 105 CSR Limited



	1		
5		(f) be conducted and reported to the satisfaction of the Secretary.	9.4.1
5	14	Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Proponent must implement these recommendations, to the satisfaction of the Secretary.	9.4.1
5	14A	Any condition of this approval that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.  Note: For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the approval or on the environmental impact of the project, and an "environmental audit" is a periodic or particular documented evaluation of the project to provide information on compliance with the approval or the environmental management or impact of the project.	Noted
5	ACCESS TO	DINFORMATION	
5	15	Within 3 months of the determination of Modification 3 and 4, until the completion of all works, including rehabilitation and remediation the Proponent must:  (a) make the following information publicly available on its website:  • the documents listed in condition 3 of Schedule 2;  • current statutory approvals for the project;  • all approved strategies, plans and programs required under the conditions of this approval;  • regular reporting on the environmental performance of the project in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval;  • a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;  • summary of the current stage and progress of the project;  • contact details to enquire about the project or to make a complaint;  • a complaints register, updated at least monthly;  • the Annual Reviews of the project;  • any Independent Environmental Audit as described in condition 13 above, 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 the satisfaction of the Secretary.	pghbricks.com.au

Page 38 of 105 CSR Limited



# 3.1 Limits of Approval

The CoA provides the limits in Table 3 relevant to Phase 1a.

Table 3 Limits of approval

Consent Condition	Limitations
S2 C12	<ul> <li>Prior to Martin Rd – Elizabeth Dr intersection upgrade total truck movements to or from the site (phase 1,2 &amp;3) must not exceed:         <ul> <li>120 per day Monday to Friday between 6:00 am and 10:00 pm</li> <li>40 per day on Saturday between 6:00 am and 6:00 pm;</li> <li>40 per day on Sunday – between 9:00am and 6:00pm (VENM only)</li> <li>Public Holidays - NIL</li> </ul> </li> <li>Following completion of the Martin Rd – Elizabeth Dr intersection upgrade total truck movements to or from the site (phase 1,2 &amp;3) must not exceed:         <ul> <li>800 per day Monday to Friday between 6:00 am and 10:00 pm</li> <li>358 per day on Saturday between 6:00 am and 6:00 pm;</li> <li>200 per day on Sunday between 9am and 6pm (VENM only)</li> <li>Public Holidays - NIL</li> </ul> </li> </ul>
S2 C 19	Extraction or any works in the extraction area may not proceed beyond 35m below the pre-existing natural surface of the ground, other than approved construction of bores or in-pit sumps and within the approved extraction areas.

# 3.2 Hours of Operation

The operating hours relevant to Phase 1a prescribed in Schedule 3, Condition 1 of the project approval are reproduced in Table 4.

Table 4 Operating hours

Activity	Permissible Hours
Truck arrival and	7:00 am to 6:00 pm Monday to Saturday
dispatch	9:00 am to 6:00pm Sunday
(VENM import only)	At no time on or public holidays
Maintenance	At any time, provided that these activities are not audible at any privately-owned residence outside of permissible hours for quarrying operations

Page 39 of 105 CSR Limited



# 4 Regulatory Framework

### 4.1 Environmental Legislation

The following legislation is relevant to the project:

- Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act);
- NSW Environmental Planning and Assessment Act 1979 (EP&A Act);
- NSW Water Management Act 2000;
- NSW Protection of the Environment Operations Act 1997 (PoEOA);
- NSW Protection of the Environment Operations (Clean Air) Regulation 2010;
- NSW Biosecurity Act 2015;
- NSW National Parks and Wildlife Act 1974 (NPW Act);
- NSW Biodiversity Conservation Act 2016;
- NSW Fisheries Management Act 1994;
- NSW Contaminated Land Management Act 1997 (CLM Act);
- NSW Roads Act 1993;
- Road Rules 2014;
- NSW Mining Act 1992; and
- NSW Local Government Act 1993.
- POEO Waste Regulation 2014.

### 4.2 Planning Instruments

The following planning instruments are relevant to the project:

- State Environmental Planning Policy (SEPP) (Major Development) 2005;
- SEPP (Mining, Petroleum Production and Extractive Industries) 2007;
- SEPP (Sydney Region Growth Centres) 2006;
- SEPP 33 Hazardous and Offensive Industries;
- SEPP 44 Koala Habitat Protection;
- SEPP 55 Remediation of Land; and
- Liverpool Local Environmental Plan.

### 4.3 Codes, Standards and Guidelines

- The Building Code of Australia;
- Australian Standards relating to construction, demolition, storage and transport of liquid and solid dangerous goods;
- Dangerous Goods Code;
- Applying SEPP 33 Hazardous and Offensive Development Application Guidelines, developed by the NSW Department of Infrastructure, Planning and Natural Resources (DIPNR, 1994); and
- Compliance Reporting Post Approval Requirements, (DPI&E as updated from time to time).

Other aspect-specific Standards and Guidelines are listed under the various environmental management plans.

Page 40 of 105 CSR Limited



#### 4.4 Permits and Licences.

#### 4.4.1 Environment Protection Licence 684

The site is subject to Environment Protection Licence (EPL) 684, issued under the NSW PoEO Act. The EPL includes the following requirements in relation to air quality and noise management and monitoring measures:

- Noise from the premises (excluding mobile plant) must not exceed:
  - An LA10 (15 minute) noise emission criterion of 55dB(A) (0700 to 2200) Monday to Saturday and 0800 to 2200 Sundays and Public Holidays; and
  - An LA10 (15 minute) noise emission criterion of 40dB(A) at all other times, except as expressly provided by this licence.
- Noise from the operation of mobile plant must not exceed:
  - An LA10 (15 minute noise emission criterion of 50dB(A) > (0700 to 2200) Monday to Saturday and 0800 to 2200 Sundays and Public Holidays; and
  - An LA10 (15 minute noise emission criterion of 40dB(A) at all other times, except as expressly provided by this licence.
- An emergency response plan (including PRIMP) must be prepared and implemented for the premises.
- The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

Reporting protocols are included in section 9.0.

### 4.4.2 Mining Lease 1771

The site is subject to Mining Lease (ML) 1771, issued under the NSW *Mining Act 1992*. The ML requires the preparation of a Mining Operations Plan (MOP) that details how mining operations will be undertaken in such a way as to prevent or minimise harm to the environment. Reporting requirements of the ML are described in section 9.0.

### 4.4.3 Water Licence

Approval number 10WA109463 for supply works was issued under the Water Management Act 2000 from 1/7/2011 until 8/11/2025 for the Sydney Basin Central Groundwater source under the Greater Metropolitan Region Groundwater Sources water sharing plan. The works licenced is excavations on Lot 1 DP 373863 and Lot 1 DP 1035249. A water access licence number 24346 is issued under that approval for 25 ML per year. The status is current and continuing.

A logbook is required to record the following regarding any water taken:

- Confirmation that a "Cease to take condition" does not apply, including date, time and flow rate or level at reference point;
- Purpose for water taken; and
- Date, volume, start and end time of pump, pump capacity.

Page 41 of 105 CSR Limited



# 4.4.4 Enforceable Undertaking

On 3 June 2020 PGH Bricks and Pavers entered into an Enforceable Undertaking (EU) with the Natural Resources Access Regulator (NRAR).

The EU requires PGH to:

- Supply the pit stored water from the site to Western Sydney Airport Corporations (WSA)
- Undertake works to prevent further surface water to enter the open pits, these works need to be completed by 30 March 2021.

The EU will be in place for a further 3 years after the completion of the works to prevent surface water entering the pits.

Page 42 of 105 CSR Limited



## 5 Organisation, Training and Resource Requirements

### 5.1 Organisation, Roles and Responsibilities

Environmental management for the Badgerys Creek facility is overseen by the Workplace Health Safety and Environment (WHSE) Personnel, and the environmental management measures throughout the site are implemented through the facility site management structure at the time. The activities on the site may vary and are not defined at this time, they will be identified per work package and staging of the overall project.

The Site Manager (subject to the phasing/work package for the project that can be the production, mining or site rehabilitation) will be ultimately responsible for the general project at Badgerys Creek including the environmental management.

Roles and responsibilities will be developed further with input from site management as this structure is put in place. In the absence of any site management structure the Senior Project Manager at CSR will be responsible for the site.

#### 5.2 Training

Employees, Contractors, including sub-contractors and visitors are required to complete an induction and/or training prior to the commencement of the works at the Project Site so that they are made aware of, and are instructed to comply with, the conditions of this approval relevant to activities they carry out in respect of the project. The induction will inform personnel of their WHSE responsibilities and gain the necessary knowledge and skills to fulfil their roles on the site.

Induction will be a CSR induction that comprises:

- introduction to CSR and overview of scope of operations;
- overview of Company Policies, including WHSE and explanation of company safety culture and standards;
- key CSR WHSE procedures
- And a site induction that covers: overview of scope of the Badgerys Creek project;
- specific requirements of the Badgery's Creek site;
- emergency contacts and incident reporting procedures;
- emergency response and notification including site evacuation / fire spill response etc;
- Works undertaken will involve development of a safe work method statement or job safety and environmental analysis that covers the specific aspects of WHSE risk for the task and outlines the control measures. Through this process, specific procedures and training pertinent to the task will be covered to minimise the opportunity for risk.
  - This process will cover (as appropriate to activity): description of proposed works/project to be conducted;
- location of, and respect for neighbours and adjoining properties;
- permitted hours of (different aspect of the project) operations/specific noise limitations;
- site WHS requirements including:
  - o heavy and light plant and equipment operations/restrictions;

Page 43 of 105 CSR Limited



- site Traffic control and Traffic Management Plan/hours of operation/access;
- Job Safety Analyses / Safe Work Method Statements / Risk Assessment / WHS legislative requirements / Hazards/ Controls / Systems and Procedures;
- authority to work permits;
- o chemical handling and storage; manual Handling; and spill response and procedures.
- supervisors and key personnel;
- site environmental monitoring and requirements;
- waste controls and recycling;
- site water controls and systems including erosion control;
- restricted areas and special operations/sensitive areas;
- location and description of site facilities/amenities;
- discharges to air and water;
- cultural issues and notification processes should work be carried out in a sensitive area;
- weed and pest control and flora and fauna preservation;
- fire controls:
- Unexpected finds procedure (esp as applicable to Aboriginal heritage).

### 5.3 Resource Requirements

Specific resource requirements are outlined in the various environmental management plans for the Badgerys Creek Project. These include environmental monitoring equipment.

For specialist environmental monitoring CSR will engage the following:

- air quality specialists for air quality monitoring;
- acoustic specialists, for noise monitoring;
- water quality specialists, for surface water and groundwater monitoring; and
- NATA-accredited analytical laboratories for water and dust analysis.

### 6 Environmental Management Measures

In addition to meeting the specific performance measures and criteria established under the approval, CSR will implement all reasonable and feasible measures to prevent, and if prevention is not reasonable and feasible, minimise, any material harm to the environment that may result from the construction and operation of the Project, and any rehabilitation required under the approval.

# 6.1 Management Plan Requirements

The appended management plans have been prepared in accordance with Schedule 5, Condition 3 of the Project Approval.

Where the conditions of the approval require consultation with an identified party, CSR will:

 consult with the relevant party prior to submitting the subject document to the Secretary for approval; and

Page 44 of 105 CSR Limited



- provide details of the consultation undertaken within the relevant document, including:
  - o the outcome of that consultation, matters resolved and unresolved; and
  - details of any disagreement remaining between the party consulted and the operator and how any unresolved matters have been addressed.

# 6.2 Construction Environmental Management

All new buildings and structures, and any alterations or additions to existing buildings and structures, that are part of the Project, will be constructed in accordance with the Building Code of Australia. All demolition work will be carried out in accordance with the relevant Australian Standard, as may be updated from time to time.

All tanks and similar storage facilities except those used for water will be constructed and appropriately bunded in accordance with the relevant Australian Standards.

Storage handling and transportation of dangerous goods will be undertaken in accordance with Australian Standards and the Dangerous Goods Code, as may be updated from time to time.

### 6.3 Operational Environmental Management

Potential impacts associated with operation of the Project will be managed in accordance with the Statement of Commitments in the modifications 3 and 4 environmental assessments and the revised commitments in the corresponding response to submission reports. These commitments are in Appendix 6 of the Project Approval and those relevant to Phase 1a are replicated in Table 5.

These management measures are also provided in the corresponding management plans described in Section 1.3 where required.

Table 5 Environmental management measures

Statement of Commitments	Timing/ frequency
General	
1. The Proponent shall implement all practicable measures to prevent or minimise	Duration of the
harm to the environment that may result from the construction, operation or	Project
rehabilitation of the project.	
2. CSR will apply to amend EPL 684 to reflect the project.	As required
3. The environmental management strategy and sub plans will be amended to	As required
reflect the project.	
Air quality	
4. The Proponent will prepare an Air Quality and Green House Gas Management	Prior to VENM
Plan (AQGHGMP) for the project to the satisfaction of the Director-General. The	importation
AQGHGMP will outline the purpose, methodology and expected outcomes of the	
dust monitoring, and will include the following content:	
<ul> <li>Dust fraction to be measured, i.e. TSP, PM10, PM2.5 etc.;</li> </ul>	
<ul> <li>Equipment to be used to measure selected dust fraction;</li> </ul>	

Page 45 of 105 CSR Limited



•	Frequency of the monitoring, i.e. sample collection schedule;	
•	Duration of the monitoring program;	
•	Location of the monitoring station/s;	
•	Standards/guidelines that are to be followed for location/construction of the monitoring station, equipment calibration, collection of samples and analysis of samples;	
•	Calibration methodology and schedule;	
•	Reporting procedure;	
•	Regulatory guidelines and compliance criteria;	
•	Action levels and contingency measures in the event that pollutant concentrations approach or are likely to exceed the relevant compliance criteria; and	
•	A consultation program that involves nearby agricultural producers and residents, in order to determine if the dust mitigation measures are being affective.	
	The AQGHGMP will detail measures to control dust and emissions from the ject Site including the following measures:	
•	Haul roads should be watered using water carts such that the road surface has sufficient moisture to minimise visible on-road dust generation but not so much as to cause pooling and mud/dirt track out to occur	
•	Unloading of trucks containing raw or unusable extracted material to be controlled using water sprays/dust suppression when generating excessive visible dust.	
•	Dust from existing stockpiles of unusable material and open pits to be controlled using water sprays with chemical additives (surfactants);	
•	Completed pits to be revegetated as soon as practicable after completion of quarrying activities.	
•	Disturbed soil surfaces to be revegetated in accordance with the RMP for the Project Site.	
•	Operational practices to be reviewed to ensure 'best practice' techniques are being employed and that operational equipment is working efficiently	
	The existing HVAS will be moved to as close to the northern boundary of the perty and the closest sensitive receiver as possible.	Prior to VENM importation
	The existing deposited dust gauges will be relocated to appropriate positions close to the property boundaries and nearest sensitive receivers as possible.	Prior to VENM importation

Page 46 of 105 CSR Limited



(8) If HVAS and deposited dust air quality monitoring identifies ongoing	As required
exceedances of the relevant air quality criteria then the reactive dust management	
program may need to be reinstated at the site.	
Noise	
9. The Proponent will implement all practicable measures to undertake the	Duration of the
development in a way that minimises the noise generated. The Proponent has	Project
made the following commitments in relation to operation noise management:	
The Dreamant will send ust a committee activities at the Dreiget Cite and	A a wa ayyi wa al
10. The Proponent will conduct quarrying activities at the Project Site only	As required
between the following hours:	
7.00 and to 0.00 pm Worlday to Saturday.	A a wa ayyi wa d
11. The Proponent will remove overburden only between the following hours:	As required
* 7.00 am to 6.00 pm Monday to Saturday.	
12. The Proponent will operate the Brick making facility and storage yard at	As required
the Project Site 24 hours a day, Monday to Sunday.	
13. The Proponent will receive and dispatch finished building products only	As required
between the following hours:	As required
* 5.00 am to 10.00 pm Monday to Friday.	
* 6.00 am to 6.00pm Saturday.	
14. The Proponent will receive and dispatch raw material only between the	As required
following hours:	As required
* 6.00 am to 10.00 pm Monday to Friday.	
* 6.00 am to 6.00pm Saturday.	
15. The Proponent will conduct cash sales only between the following hours:	As required
* 6.00 am to 6.00 pm Monday to Saturday.	As required
0.00 and to 0.00 pm Monday to Saturday.	
16. The Proponent will operate the sales selection/customer display centre only	As required
between the following hours:	
*8.00 am to 5.00 pm Monday to Sunday.	
17.Construction works shall be limited to 7am to 6pm Monday to Friday and 8am	During construction
to 1pm on Saturdays.	
18. A CNVMP will be prepared and implemented during project construction.	Prior to works
18. The construction noise mitigation measures described in Chapter 5.5 of the	During construction
preferred project noise impact assessment report (appended to the RTS) shall be	
implemented.	
19. Vibration during construction will be managed through the CNVMP to ensure	During construction
that vibration impacts comply with the limits prescribed in British Standard BS	
7385 for structural damage and in Assessing Vibration: a technical guide (DECCW,	
2006) for human response.	
20. The Proponent and/or its appointed contractors will select and maintain bulk	Duration of the
earthwork machinery as specified in the preferred project noise impact	Project
assessment report (appended to the RTS).	
21. Broadband reversing alarms or other non-tonal vehicle movement and warning	Duration of the
alarms shall be fitted to all machinery on site. The potential noise impact	Project
associated with reversing alarms shall be managed and minimised via a	
combination of proactive driver/operator training and operational procedures.	
22. The Proponent shall implement a noise monitoring programme which would	For the first 12 months
involve quarterly attended noise monitoring at a number of nearby identified	of the Project
receiver locations for 12 months after all Modification 3 and 4 activities are in full	
operation. If there are no exceedances of the project noise trigger levels during	
appearance in the ended during	

Page 47 of 105 CSR Limited



quarterly noise monitoring during the first year of monitoring then noise monitoring will cease. Additional noise monitoring would be undertaken in response to any noise complaints.	
23. The Proponent shall undertake consultation with identified Martin Road residential receivers predicted to exceed the RNP criteria and conduct further	Prior to increase of heavy vehicle
investigation of their residences (as detailed in Section 2.3.3 and 4.1 of the RTS) to	movements above the
determine whether they qualify for and require the 'Type 1' treatment package	original Project
from RMS's (2015) At-receiver Treatment Guideline.	Approval heavy
	vehicle movement
	limits
23. Further investigations of the six residences potentially affected by road noise	Prior to increase of
will be undertaken prior to increasing heavy vehicle movements along Martin Road	heavy vehicle
above the approved heavy vehicle numbers and no greater than 180 truck	movements above the
movements in the daytime period. The investigation will determine whether the	original Project
residences require the 'Type 1' treatment package from RMS's (2015) At-receiver	Approval heavy
Treatment Guideline.	vehicle movement
	limits
24. Prior to construction of the Martin Road-Elizabeth Drive intersection, existing	Prior to construction
road noise levels would be qualified to determine if architectural treatment should	of intersection
be offered to receivers along Elizabeth Drive raising complaints about increased	
road noise levels.	Duration of the
24. The Proponent will maintain a noise complaint register.	Duration of the
Surface water – stormwater management	Project
25. The Proponent shall manage surface water on the Project Site in accordance	Duration of the
with the WMP prepared for the Project Site and revised for the project, including	Project
surface water management measures include in the Modification 3 and 4 EA and	Troject
the RTS.	
26. If during the operational phase of the quarry or on completion of the quarry	Prior to dewatering of
operations, the proponent wishes to make use of the water from the pits/dams in	pits
the brick making process or for reuse at other premises offsite etc, a licence will	'
be obtained from DPIE.	
27. Sediment basins 4, 5 and 6 and the new basins at the raw material stockpile	Prior to works
area and Pit 3 will be sized and operated in accordance with Landcom's (2004)	
Managing Urban Stormwater: Soils & Construction. If any of these basins are to be	
modified to perform additional stormwater treatment functions in future (other	
than sediment capture), then appropriate modelling and design of the basins will	
be required at that time. In this case monitoring of discharges from the basin at Pit	
3 to South Creek will be required.	
28. The site WMP will be revised prior to commencement of the modification to	Prior to works
include the revised surface water management approach, and monitoring of any	
water discharged from the site.	
Surface water – monitoring  29. Electrical conductivity, pH, total nitrogen, total suspended solids, turbidity,	Duration of the
total alkalinity, arsenic and copper will be monitored at the discharge points to	Project
Badgerys Creek and South Creek. Discharges will be monitored daily during the	Troject
first month of continuous discharge, then weekly if the first month of data does	
not exceed concentration limits. Monitoring will revert to daily if any limits are	
exceeded and/or concentrations are reduced below limits.	
executed analysis concentrations are reduced below limits.	

Page 48 of 105 CSR Limited



30. Total dissolved solids, total phosphorus, arsenic, cadmium, chromium, lead,	Duration of the
nickel, zinc and mercury will be sampled weekly during the first two months, which	Project
will reduce to monthly if there are no exceedances.	
31. The analytes previously sampled in Pit 1 will be monitored at three depth levels	Duration of the
from the surface to 6 m at two locations near the discharge point to Badgerys	Project
Creek. Water will be monitored weekly for three weeks prior to discharge, then	-
monthly. This monitoring will continue for the life of the project, and in the	
perched treatment basin described above.	
32. Similar sampling is also required for the new basin at Pit 3 if the basin is being	Duration of the
used to treat Pit 3 water (other than sediment capture). The list of analytes may	Project
be able to be reduced according to the future quality of stormwater collected in	•
Pit 3.	
Surface water – licensing and approvals	
33.CSR will apply to the EPA to amend the EPL to incorporate the discharge rates	Prior to works
and concentration limits for relevant physical and chemical stressors, and	
toxicants, at the discharge point to Badgerys Creek.	
34.CSR will apply to the EPA to amend the EPL, if and when required, to	As required
incorporate appropriate discharge rates and concentration limits for discharges	
from the basin at Pit 3, for which time the basin provides additional water	
treatment other than sediment capture.	
35.CSR will consult DPIE Water on the need for water licenses associated with the	Prior to works
modification.	THOI to Works
36. The EPA will be engaged, post approval, to determine whether the pit water	Prior to works
must be classified in terms of the Protection of the Environment Operations Act	THOI to WOIKS
1997 (POEO Act) and to include the discharge point in the EPL.	
Surface water – erosion and sediment control	
37. Erosion and sediment controls will be implemented at the pit areas once they	During rehabilitation
are filled with VENM and rehabilitation has commenced. These measures will	Daring renadilitation
remain in place until surfaces are fully stabilised.	
38. Erosion and sediment controls will be implemented along the unsealed VENM	Duration of the
haul road, which will direct runoff to the pits or local sediment traps.	Project
Groundwater	rioject
39. The Proponent shall prepare and implement a Groundwater Monitoring	Prior to and for the
Program for the Project Site generally in accordance with the methodology	duration of the project
provided in Chapter 11 of the 2011 EA, subject to consultation with the DPIE	duration of the project
(water, lands and primary industry) and the satisfaction of the Director-General of	
the DP&I.	
40. The WMP will be updated to include the groundwater monitoring network and	Prior to works
a TARP for exceedances of groundwater criteria, which will be developed based on	FIIOI to WOIKS
the baseline groundwater data.	
41. The Proponent shall report the results of the Groundwater Monitoring	Duration of the
Program to the Secretary of the DPIE on an annual basis.	Project  Duration of the
42. The Proponent shall implement appropriate management measures in relation	
to groundwater as indicated by the Monitoring Program and agreed with the	Project
Secretary.	Drior to works
43. A licence to authorise any groundwater monitoring installation, required as	Prior to works
part of this project, shall be obtained from the DPIE Water prior to any drilling	
commencing.	

Page 49 of 105 CSR Limited



Reh	abilitation	
	The site will be progressively rehabilitated in accordance with the approved	During rehabilitation
	abilitation strategy and rehabilitation management plan.	During remadilitation
	The rehabilitation strategy and rehabilitation management plan will be revised	Prior to works
	ncorporate the project, and any additional management strategies to ensure	THE CONCINC
	porary stabilisation of exposed surfaces, permanent stabilisation strategies	
	progressive rehabilitation with groundcover vegetation.	
	The rehabilitation management plan will be revised to exclude plant species	Prior to works
	are known to attract wildlife and grow to a size which will penetrate the OLS.	THOI to Works
	The Proponent shall carry out rehabilitation works at the Project Site in	During rehabilitation
	ordance with the RMP prepared for the Project Site.	Daring renabilitation
	The Proponent will prepare a Final Landform Rehabilitation Plan in	Two years prior to the
	sultation with the DPIE two years prior to the completion of all approved	completion of
	rrying activities.	quarrying
_	ffic and transport	quarrying
	The Proponent shall manage traffic movements to and from the Project Site	
	erally in accordance with the following:	
•	Personnel operating trucks and vehicles to and from the Project Site would	Duration of the
	be required to undertake a site-specific health and safety induction,	Project
	specifying operating hours and vehicle speed limits on Martin Road.	
		Prior to works
•	A heavy vehicle protocol would be developed for the Project Site and	FIIOI LO WOIKS
	distributed to relevant staff and contractors during induction procedures.	
	The protocol would deal with such issues as timing of vehicle movements,	
	idling of vehicles, speed limits and parking.	
•	Unnecessary vehicle movements would be minimised where possible.	Duration of the
	officeessary vehicle movements would be minimised where possible.	Project
•	Deliveries would be scheduled on larger capacity 'Truck and Trailer' vehicles	Duration of the
	rather than 'Truck Only' vehicles where possible to minimise truck	Project
	movements.	
•	A construction traffic management plan will be prepared and implemented	Prior to and for the
	to manage impacts on the road network, including the intersection, from	duration of the project
	construction vehicles.	
		Prior to increase of
•	Traffic signals and road upgrades will be constructed at the Martin Road-	heavy vehicle
	Elizabeth Drive intersection prior to increasing heavy vehicle movements	movements above the
	from the project above the approved heavy vehicle numbers.	original Project
		Approval heavy
		vehicle movement
		limits
		Duration of the
•	CSR will contribute to the upgrade and ongoing maintenance of Martin Road	
	in accordance with the deed of agreement with LCC.	Project
Cult	tural heritage	I
	The Proponent shall adopt the following measures in relation to the	
	nagement of cultural heritage on the Project Site:	
		Duration of the
•	The heat retainer hearth will continue to be protected by a fenced 10m	Project
	exclusion zone.	-

Page 50 of 105 CSR Limited



•	All Aboriginal heritage items collected during survey and test excavations will be reburied with the hearth in consultation with the RAPs.	During surveys and excavations
•	Should Aboriginal objects be uncovered during the course of the approved works, works shall cease. In cases where historical items have been uncovered, Heritage NSW is to be advised or should indigenous items be uncovered the National Parks and Wildlife Service shall be advised.	Duration of the Project
•	Workers/contractors shall be informed of their obligations under the NPW Act 1974, namely that it is illegal to disturb, damage or destroy an Aboriginal object without the prior approval of the Secretary of DPC.	Prior to and for the duration of the project
•	Should human remains be found in, on, or under the land during construction, the responsible party shall:	Duration of the Project
	o Contact the local police.	
	<ul> <li>Not disturb or excavate the remains.</li> </ul>	
	<ul> <li>Immediately cease all work at the particular location.</li> </ul>	
	<ul> <li>Notify the Heritage NSW (DPC) office as soon as practicable and provide any available details of the remains and their location.</li> </ul>	
	<ul> <li>Not recommence any work at the particular location until authorised in writing by the Heritage NSW.</li> </ul>	
52.	The AHMP will be updated with the findings of the Modification 4 ACHA.	Prior to works
	logy	
	The Proponent shall adopt the following measures in relation to the removal any trees on the Project Site:	
•	The canopy of the trees to be visually inspected prior to clearing to assess for the presence of fauna. Where bird species are detected the tree is to be nudged prior to felling to encourage the fauna to vacate the tree prior to felling. Trees to be left in situ until the birds leave the canopy.	Prior to the removal of any trees
•	Felled trees are to be left in-situ for at least 24 hours to allow fauna species to relocate. Qualified personnel are to be on hand to check for wildlife and relocate them.	During the removal of any trees
•	Felled wood is to be relocated to the remnant woodland (and not placed in piles) or chipped and used in rehabilitation areas.	After the removal of any trees
•	Should any wildlife be inadvertently injured during the proposed works, WIRES or an accredited veterinarian shall be contacted.	Duration of the Project
•	A 60 m buffer area shall be provided along Badgerys Creek and the Badgerys Creek tributary, except where Pit 2 extends into these buffers. Rehabilitation works are to be undertaken in this area in accordance with the RMP.	Duration of the Project
•	Five local native trees shall be planted for each mature native tree that is removed. The replacement trees shall consist of a diversity of local provenance tree species from the native vegetation community (or communities) that occur, or once occurred on the site. The plantings shall be	

Page 51 of 105 CSR Limited



located adjacent to the riparian vegetation along South Creek, Badgerys Creek and its tributary.	
Aquatic biodiversity	
54. A 40 m vegetated riparian zone will be maintained around the wetland adjacent to South Creek and 20 m zone will be maintained around the tributary to Badgerys Creek (except over Pit 2).	Duration of the Project
55. As the hydraulic modelling for the surface water assessment was indicative, geomorphology will be assessed in greater detail to validate the bed and bank materials of Badgerys Creek prior to finalisation of the pit dewatering strategy. This will include quantification of bed and bank material and particle size and calculation of critical shear stress for the bed and bank to determine its sensitivity to erosion.	Prior to finalisation of the dewatering strategy
56. If the bed and bank materials are demonstrated to be sensitive to erosion, the optimum flow rate that can be achieved without impacting the creek bed and banks will be determined in a sediment transport model.	Prior to finalisation of the dewatering strategy
57. It will be necessary to gain further water quality and flow data to determine the impact of discharges on Badgerys Creek. Water quality will be monitored every month at the four Badgerys Creek and South Creek monitoring locations as described in Section 6.3.2 of the EA. This will include nitrogen speciation to determine which portion of nitrogen is bioavailable and could impact aquatic ecosystems.	Prior to and for the duration of the Project
58. A biological monitoring program will be developed to detect if the macroinvertebrate community is changed by exposure to discharge water. An instream vegetation monitoring program will be prepared and implemented to detect if the discharge is impacting vegetation community composition and mortality.	Prior to and for the duration of the project
59. Monitoring for changes to instream vegetation and macroinvertebrates will be incorporated into a pit dewatering plan as a sub-plan to the existing water management plan.	Prior to finalisation of the dewatering strategy
60.CSR will compile a fauna relocation plan. This plan will develop strategies for aspects such as transferring aquatic fauna, acclimatising aquatic fauna to different water conditions and managing pest species. DPIE will be consulted during the development of this strategy.	Prior to finalisation of the dewatering strategy
Contamination	
61. The potential presence of asbestos in the eastern edge of Pit 1 will be added to the site Asbestos Register.	Prior to works
62. A materials management plan will be prepared to ensure that surface water, backfilled material and imported soils are handled appropriately, do not pose a risk to human health or the environment and will be suitable for the proposed land use. The plan will provide procedures to appropriately quantify, classify, dispose of and report on potential contaminants.	Prior to works
63. A UFP will be prepared, providing guidance in the event that future below ground excavations identify contaminated materials (e.g. asbestos, staining, odours). The UFP will outline procedures for handling, assessing and managing any contamination that may be identified as part of Modification 4 works. If previously unidentified contaminated materials are encountered during construction and operation of the proposed modification, relevant statutory requirements, including potential soil testing and waste classification, will need to be complied with, and the material managed and disposed of appropriately.	Prior to works

Page 52 of 105 CSR Limited



64. Stored/stockpiled materials within the proposed disturbance footprints will be inspected and they will be recycled or disposed at facilities which can legally	Duration of the Project
receive such materials.	
65. Soil materials within the vicinity of the Modification 3 works will be assessed	Duration of the
in accordance with NSW EPA (2014) Waste Classification Guidelines and either re-	Project
use them on site where suitable or dispose of them offsite to a landfill which can	
legally receive such materials.	
66.Conduct a hazardous material survey on existing site structures prior to	Prior to demolition/
demolition/alteration activities.	alteration
Waste	
67. The Proponent shall manage waste in relation to the project in accordance with	Duration of the
the existing WMP for the Project Site.	Project
68. The existing WMP will be updated to include the importation and handling of VENM.	Prior to works
69. All waste generated on site will be managed in accordance with the site's waste	Duration of the
management plan that will follow the waste hierarchy of avoid, reduce, re-use,	Project
recycle and will be updated to include project works.	
Visual amenity	
70. Proposed lighting at the site will still comply with Australian Standard AS4282	Duration of the
(INT) 1995 - Control of Obtrusive Effects of Outdoor Lighting.	Project
Environmental management	
72. The Proponent shall prepare an EMS for the Project Site to provide environmental management practices and procedures to be followed during the operation of the project. The EMS shall include, but not necessarily be limited to:	Prior to works
<ul> <li>identification of statutory and other obligations that the Proponent is required to fulfil in relation to operation of the project;</li> </ul>	
<ul> <li>a description of the roles and responsibilities for all key personnel involved in environmental management of the project;</li> </ul>	
<ul> <li>the environmental policies and principles to be applied to the operation of the project; and</li> </ul>	
<ul> <li>describe in general terms how the environmental performance of the project would be monitored and managed.</li> </ul>	

### **6.3.1** Extraction Limitations

In accordance with Schedule 2 Condition 18 a registered surveyor has marked out the boundary of the approved area of extraction within Pit 3 – Refer to Figure 4. These boundaries are marked on site by large pegs with high visibility markings and a written explanation as to what they represent (eg NE cnr Pit 3).

Within these extraction areas, PGH will not extract any extractive materials or carry out any work in the extraction area below 35 m below the pre-existing natural surface of the ground, other than construction of approved bores or in-pit sumps.

Page 53 of 105 CSR Limited



#### 6.3.2 Additional rehabilitation matters

The site will be rehabilitated to the satisfaction of the Secretary. This rehabilitation will be generally consistent with the proposed rehabilitation strategy described in the EA and the Rehabilitation Management Plan (RMP), and will comply with the objectives in Table 6.

Table 6 Rehabilitation objectives

Feature	Objective
All areas of the site affected by the project	■ Safe
arrested by the project	<ul> <li>Hydraulically and geotechnically stable</li> </ul>
	■ Non-polluting
	■ Fit for the intended final land use(s)
	<ul> <li>Final landform integrated with surrounding natural landforms as far as is reasonable and feasible, and minimising visual impacts when viewed from surrounding land</li> </ul>
Surface infrastructure	■ Decommissioned and removed, unless otherwise agreed by the Secretary
Landscaping bunds	<ul><li>Hydraulically and geotechnically stable</li><li>Vegetated</li></ul>
Pit 1, 2 and 3	<ul> <li>Backfilled to a landform that is consistent with natural ground level and is geotechnically stable</li> </ul>
	■ Free draining

The Rehabilitation Management Plan (RMP) will be implemented progressively and as soon as reasonably practicable following disturbance to minimise the total area exposed for dust generation at any time.

CSR will complete the backfilling of Pits 1 and 2 within 6 years of commencement of Phase 1 or otherwise agreed by the Secretary, and pit 3 within 2 years of date of completion of extraction activities in Pit 3.

A Final Landform Rehabilitation Plan will be prepared in consultation with the BCD, DPI&E and MEG and any other relevant authorities or agencies two years prior to the completion of all approved quarrying activities.

# 6.3.3 Dewatering

CSR will undertake the Dewatering works in accordance with the Dewatering Management Plan and the Dewatering Infrastructure Plan.

CSR has entered into an agreement with WSA for them to take the Pit water from Pit 1 to their site for their dust suppression during their Civil works. The dewatering infrastructure is in place concurrently and will be managed in accordance with the approved management plans.

Page 54 of 105 CSR Limited



# 7 Monitoring and Performance Criteria

#### 7.1 General

Inspection, monitoring and auditing will be undertaken to assess and record whether activities are in compliance with regulatory requirements and the objectives outlined in the Health, Safety and Environment Management System, which guides Project Site Operations.

### 7.2 Environmental Monitoring

A summary of parameters to be monitored and their performance criteria are given in the tables below. Monitoring locations are given on Figure 3. Details are given in each Management Plan.

### 7.3 Construction Monitoring

Table 7 summarises specific performance criteria relating to construction activities, responsibilities, and where more detailed information may be found. Monitoring locations are given on Figure 3.

Table 7 Construction environmental management commitments

Condition	Action	Details	Responsible Staff	When
S3 C3	Approved construction works must be undertaken during standard construction hours	Noise Management Plan	Site Manager	During construction

# 7.3.1 Operational Monitoring and Inspections

Table 8 Operational environment monitoring requirements to 13 summarise specific performance criteria relating to operational activities within the site, responsibilities, and where more detailed information may be found. Monitoring locations are given on Figure 3.

Table 8 Operational environmental monitoring requirements

Condition	Action	Details	Responsible Staff	Accountability	When
S2 C18	Extraction areas to be surveyed and plan supplied to DPI&E	Section 6.3.1	Registered Surveyor	Raw Materials Manager	Completed
S2 C18	Extraction boundaries clearly marked on site	Section 6.3.1	Raw Materials Manager	Raw Materials Manager	Completed

Page 55 of 105 CSR Limited



S2 C19	No unapproved works below 35m below pre- existing natural ground level	Section 6.3.1	Raw Materials Manager	Raw Materials Manager	Prior to commencemen t of the Project, then every 3 months
Condition	Action	Details	Responsible Staff	Accountability	When
S3 C5	Noise generated from the project will not exceed criteria (Table 8)	Noise Management Plan (NMP)	Noise consultant	Site Manager	During operations – measured within 14 days of commencemen t of the Project
S3 C6	Traffic noise generated by the project will not exceed criteria (Table 10)	Noise Management Plan (NMP)	Noise consultant	Site Manager	Prior to commencemen t of the Project
S3 C9	Particulate matter emissions generated by the project will not exceed criteria (Table 13) at any residence on privately owned land	Air Quality Management Plan (AQMP)	Laboratory	Site Manager	During operations  Excluding extraordinary events
S3 C14	Operate a meteorological station in the vicinity of the site	Air Quality Management Plan (AQMP)	Laboratory	Site Manager	During all operations
S3 C19	All surface water discharges will comply with volume and quality limits (Table 15)	Soil and Water Management Plan (SWMP)	Laboratory	Site Manager	During surface water discharge events

Page 56 of 105 CSR Limited



S3 C23 ii	Surface water quality in the vicinity of the site will be monitored for potential impacts (Table 15)	Soil and Water Management Plan (SWMP)	Laboratory	Site Manager	Table 15
S3 C23 iii	Groundwater quality in the vicinity of the site will be monitored for potential impacts (Table 18)	Groundwater Management Plan (GWMP)	Laboratory	Site Manager	Table 18
S3 C26	Laden truck time, date, weights, and load type to be recorded and reported	Traffic Management Plan (TMP)	Weighbridge operator	Site Manager	All laden VENM import trucks Published 6 monthly
S3 C30	Monitor identified places or objects of Aboriginal Heritage	Aboriginal Heritage Management Plan (AHMP)	Nat Env manager	Site Manager	Prior to clearing activities
S3 C36	Monitor Rehabilitation	Rehabilitation Management Plan (RMP)	Rehabilitation Manager	Site Manager	As per Rehabilitation Management Plan (RMP)

Table 9 Operational noise criteria

Receiver ID	Morning Shoulder	Day	Evening	Night	
	L <sub>Aeq (15 min)</sub>	L <sub>Aeq (15 min)</sub>	L <sub>Aeq (15 min)</sub>	LAeq (15 min)	L <sub>AFmax</sub>
R9, R25, R35	43	45	40	38	52
R5, R26, R27, R28, R29, R30, R31, R32, R34, R42, R43, R44, R45, R46	42	42	41	38	52
R11, R12, R13, R14, R15	43	43	43	38	52
All other residences	-	40	35	35	52

Reference: Table 2 of Project Approval.

Page 57 of 105 CSR Limited



Table 10 Road traffic noise criteria

Road Noise Receiver ID	Day / Evening L <sub>Aeq (1 hour)</sub>	Night L <sub>Aeq (1 hour)</sub>				
Prior to Martin Road - Elizabeth Road Intersection Upgrade						
Residents on Martin Road	60	55				
Following Martin Road - Elizabeth Road	Following Martin Road – Elizabeth Road Intersection Upgrade					
RN5	61	55				
RN9, RN21	62	55				
RN14, RN22	63	55				
RN16	64	55				
All other residences on Martin Road	60	55				

Reference: Table 3 of Project Approval.

Table 11 Ambient air quality criteria

Pollutant	Averaging Period		Criterion
Particulate Matter < 2.5 $\mu$ m (PM <sub>10</sub> )	Annual	<sup>a,d</sup> 8 μg/m <sup>3</sup>	
Particulate Matter < 2.5 $\mu$ m (PM <sub>10</sub> )	24 hour	<sup>b</sup> 25 μg/m <sup>3</sup>	
Particulate Matter < 10 $\mu$ m (PM <sub>10</sub> )	Annual	<sup>a,d</sup> 25 μg/m <sup>3</sup>	
Particulate Matter < 10 $\mu$ m (PM <sub>10</sub> )	24 hour	<sup>b</sup> 50 μg/m³	
Total Suspended Particulates (TSP)	Annual	<sup>a,d</sup> 90 μg/m <sup>3</sup>	
<sup>c</sup> Deposited Dust (Insoluble Solids)	Annual	<sup>b</sup> 2 g/m²/month	<sup>a,d</sup> 4 g/m²/month

Notes for Table 11:

Table 12 Point source air quality criteria

Pollutant	Units	100 percentile Concentration Limit	Method
Total Solid Particles	mg/m³	100	TM-15
Hydrogen fluoride	mg/m³	50	TM-9
Nitrogen Oxides	mg/m³	2000	TM-11
Chlorine	mg/m³	NL	TM-7

Page 58 of 105 CSR Limited

<sup>&</sup>lt;sup>a</sup> Total impact (ie increase in concentrations due to the project plus background concentrations due to all other sources).

b Incremental impact (ie increase in concentrations due to the project alone, with zero allowable exceedances of the criteria over the life of the project.

<sup>&</sup>lt;sup>C</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.

d Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents or any other activity agreed by the Secretary.

<sup>&</sup>lt;sup>e</sup> Reference: Table 4 of consent.



Dry gas density	kg/m³	NL	TM-23
Moisture content	%	NL	TM-22
Molecular Weight of stack gases	g/g mole	NL	TM-23
Odour	Odour	NL	OM-8
Temperature	°C	NL	TM-2
Type I substances	mg/m³	NL	TM-12
Pollutant	Units	100 percentile	Method
		Concentration Limit	
Type II substances	mg/m³	Concentration	TM-13
Type II substances Velocity		Concentration Limit	
	mg/m³	Concentration Limit NL	TM-13

NL To be monitored but no criteria specified.

Table 13 Surface water monitoring program

Aspect	Parameters	Frequency	Compliance Criteria
Monitor surface water Prior to discharge	pH 6.5 – 8.0 (ANZECC) Turbidity <150 NTU		as noted in the revised EPL
		As required on discharge	

Table 15 Discharge quality criteria

Aspect	Parameters	Frequency	Compliance Criteria
Monitor pit water	Conductivity	Event daily during the	
discharge to the	pH	first month of the	
Badgerys Creek and	total nitrogen	continuous discharge,	
South Creek prior to and	Total Suspended Solids	then weekly if the first	As outlined in the revised
during discharge	Turbidity	month of data does	EPL for the site
	Total alkalinity	not exceed	
	Arsenic	concentration limits,	
	Copper	Monitoring will revert	
		to daily if any limits	
		are exceeded and/or	
		concentrations are	
		reduced below limits	

Page 59 of 105 CSR Limited



Monitor Pit water discharge to Badgerys Creek and South Creek	Total Dissolved solids Total Phosphorus Arsenic Cadmium Chromium Lead Nickel Zinc Mercure	Sample weekly during pit water discharge to the creeks for the first two months, which will reduce to monthly if there are no exceedances	As outlined in the revised EPL for the site
Pit 1 discharge water	Physical and chemical stressors is equal to the 80 <sup>th</sup> percentile of recoded data from Badgerys Creek over the past 24 months or the ANZECC guidelines for freshwater (95% level of species protection)	Weekly for three weeks prior to discharge then monthly, this monitor will continue for the life of the project (dewatering process)	As outlined in the revised EPL for the site
Pit 3 discharge to creek	Physical and chemical stressors is equal to the 80 <sup>th</sup> percentile of recoded data from Badgerys Creek over the past 24 months or the ANZECC guidelines for freshwater (95% level of species protection)	Weekly for three weeks prior to discharge then monthly, this monitor will continue for the life of the project (dewatering process)	As outlined in the revised EPL for the site

Table 17 Groundwater assessment criteria

Parameter	Location	Frequency	Criterion
Depth below ground level, pH, Electrical Conductivity, Dissolved Metals, Petroleum Hydrocarbons	8 bores as per Figure 3	quarterly	Monitor data and develop baseline ground data
Depth below ground level, pH, Electrical Conductivity, Dissolved Metals, Petroleum Hydrocarbons		Report Annually to DPIE	Monitor data and develop baseline ground data

Page 60 of 105 CSR Limited



# 7.4 Inspections

Monitoring of the implementation of the various management plans will be undertaken as part of regular site inspections by CSR management and HSE Personnel. Inspection of activities will be undertaken quarterly by supervisory staff. On-going monitoring of these activities is essential to ensure compliance with regulatory requirements and conditions of approval.

Page 61 of 105 CSR Limited



#### 8 Evaluation and Review

#### 8.1 Annual Review

Prior to commencing VENM import, and annually thereafter, CSR will submit a review to the Department reviewing the environmental performance of the project to the satisfaction of the Secretary. This review will:

- a) describe the project (including any progressive rehabilitation) that was carried out in the previous calendar year, and the project that is proposed to be carried out over the current calendar year;
- b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against the:
- relevant statutory requirements, limits or performance measures/criteria;
- requirements of any plan or program required under this approval;
- monitoring results of previous years; and
- relevant predictions in the documents listed in condition 3 of Schedule 2;
- c) evaluate and report on:
- the effectiveness of the air quality and noise management systems; and
- compliance with the performance measures, criteria and operating conditions in this approval.
- d) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
- e) identify any trends in the monitoring data over the life of the project;
- f) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
- g) describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.

The Proponent must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 8 of Schedule 5) and any interested person upon request.

# 8.2 Strategy, Plan and Program Revision

All project documents are generated, numbered, approved, revised, transmitted, and stored in accordance with the project's Document Control Plan.

The EMS review ensures the suitability, effectiveness, and adequacy of the plan. The EMS is formally reviewed annually (as a minimum) and as described below.

The review is conducted by a review team comprising the Project Manager (or delegate) and the Environmental Advisor/ Project Environmental Manager (or Safety Manager) and considers performance against the EMS with respect to incident trends and findings from internal and external audits.

The Project Manager (or delegate) ensures any changes to the EMS as a result of review/ change is communicated to personnel.

This environmental strategy and the management plans and programs prepared for the project will be reviewed and revised within three (3) months of the following:

Page 62 of 105 CSR Limited



- the submission of an Incident Report (refer 9.2);
- the submission of an annual review (refer 8.1);
- the submission of an Independent Environmental Audit (refer 9.4); and
- any modification to the conditions of approval (unless the condition requires otherwise).

This is in accordance with the intent of the conditions of approval to ensure that strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

All approved management plans, strategies and programs will be implemented until any updated measures have been approved by the relevant authorities.

Page 63 of 105 CSR Limited



### 9 Reporting

CSR will provide regular reporting in accordance with the approval, ML and EPL conditions. Approved plans, strategies and programs, monitoring results and environmental performance will be published on the website.

Environmental reporting is carried out both through the CSR internal reporting system, on a daily basis, and directly to senior management through monthly reports. Reporting will cover the following:

- Incidents, including exceedances of impact assessment criteria and/or performance criteria;
- complaints; and
- non-compliances with statutory requirements;

The key features of the Environmental reporting system include:

- daily inspection and identification of issues by supervisory staff.
- entry into the CSR Safety/Environmental Register which provides:
  - unique identification of each issue including non-compliance;
  - description of the issue;
  - investigation;
  - actions;
  - o action completion timeframe and responsibility;
  - monitoring of action due dates and close out;
  - o management signoff; and
  - data base of records / incidents.

An Environmental Report is submitted to CSR Senior Management monthly detailing:

- any site non-compliance with statutory and licence requirements;
- inspections and audits by statutory authorities;
- any project or improvement work being conducted on site; and
- any complaints received during the month.

### 9.1 Regular Reporting

### 9.2 Reporting under the Conditions of Approval

In accordance with the conditions of approval, CSR will provide the reports in Table 188 to the Secretary within the nominated timeframe. Details of environmental management plans are given in section 6.0.

Table 18 Reporting requirements from CoA

Condition	Description	Frequency	Distribution
S 2 C 17	Production Data in accordance with this condition	Annually (calendar year)	MEG
S 3 C 11	Air Quality Audit in accordance with this condition	Prior operations	EPA, DPI&E

Page 64 of 105 CSR Limited



S 3 C 26	Truck movement numbers on the website	Every 6 months	Website
S 4 C 1	Notification of Landowners (details in section 9.2) of monitoring results that exceed any criteria in Schedule 3	7 days after obtaining exceeding monitoring results	Affected landowners and tenants
S 4 C 2	Independent Review (details in section 9.3)	Within 3 months of request from DPI&E	DPI&E, relevant landowner
S 5 C 9	Incident reporting (details in section 9.2)	Immediately through the Department's Major Project Website	DPI&E and any other relevant agency
S 5 C 10	Non-Compliance Notification	Immediately through the Department's Major Project Website	DPI&E and any other relevant agency
S 5 C 11	Regular reporting on the website (details in section 9.1.4)	Following commencement of works – Phase 1	Website
S 5 C 12	Annual Review (details in section 8.1)	Prior to commencement of VENM import thence annually	DPI&E, Council, CCC
S 5 C 13	Independent Environmental Audit (details in section 9.4)	Prior to commencing VENM import and annually thereafter	DPI&E and other agencies upon request

# 9.3 Reporting under the Mining Lease

In accordance with ML1771, CSR will provide the reports in Table 1819 to the MEG within the nominated timeframe.

Table 19 Reporting requirements from ML

Condition	Description	Frequency	Distribution
S 2 C 3(f)	Prepare a Rehabilitation Report that includes a detailed review of the progress of rehabilitation against the performance measures and criteria established in the Mining Operations Plan (MOP) in accordance with any relevant annual reporting guidelines published on the Department's website at https://www.resourcesandgeoscience.nsw.gov.au/minersand-explorers/applications-and-approvals/environmentalassessment/mining	Submitted annually on the grant anniversary date (4 <sup>th</sup> May) or at such other times as agreed by the Minister	MEG
S 2 C 4	Non-compliances to be reported on the form specified (details in section 9.2)	Within 7 days	MEG
S2 C 5	Environmental Incident notifications and reports are to be provided to the Secretary	Within 7 days	MEG
	Exploration reports will be prepared in accordance with "Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales"	Submitted annually on 4 <sup>th</sup> June (one month after the grant anniversary date of 4 <sup>th</sup> May)	MEG

Page 65 of 105 CSR Limited



# 9.4 Reporting under the EPL

In accordance with EPL 684, CSR will provide the reports in Table 20 to the EPA within the nominated timeframe.

Table 20 Reporting requirements from EPL

Condition	Description	Frequency	Distribution
R1.1	Complete an Annual Return in the approved form comprising:  a) A Statement of Compliance  b) A Monitoring and Complaints Summary	Annually, submitted before 17 <sup>th</sup> January	ЕРА
R2.1	Notification of environmental harm (details in section 9.2)	Immediately to 131 555, written details within 7 days	EPA
R3	Written report requested by EPA (details to be specified by requesting officer)	As requested	EPA

## 9.4.1 Information Required on the Website

In accordance with the Conditions of Approval and the EPL, CSR will make the following information associated with the Badgerys Creek project available on its website.

- the documents listed in section 1.3;
- current statutory approvals for the project;
- all approved strategies, plans and programs required under the conditions of approval;
- regular reporting on the environmental performance of the project in accordance with the reporting arrangements in any plans or programs approved under the conditions of approval;
- a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any conditions of approval, any approved plans and programs, and the EPL;
- summary of the current stage and progress of the project;
- contact details to enquire about the project or to make a complaint;
- a complaints register, updated at least monthly;
- the Annual Reviews of the project; and
- any Independent Environmental Audit as described in section 9.4, and the operators' response to the recommendations in any audit.

# 9.5 Incident and Non-compliance Reporting

For the purposes of this EMS, an 'incident' is an occurrence or set of circumstances that:

- causes or threatens to cause material harm to the environment; and/or
- breaches or exceeds the limits or performance measures/criteria in the Project Approval

A 'non-compliance' is an occurrence, set of circumstances or development that is a breach of the Project Approval.

Page 66 of 105 CSR Limited



Common types of environmental incidents include:

- sewage spills (to land or to water)
- hydrocarbon spills (to land or to water)
- sediment discharge (to land or to water)
- unexpected finds (cultural heritage); and
- damage to heritage items or protected flora and fauna.

Possible non-compliances include non-compliance with the management measures outlined in this EMS, and mitigation strategies/ management measures outlined in the management plans.

Where detected, any non-compliance or environmental impact exceeding specified limits are investigated by the Environmental Advisor to determine the extent of possible non-conformance. The non-compliance is corrected as soon as possible with necessary action taken to prevent recurrence.

All non-compliances are reported and clearly identify the corrective/ preventative actions to be taken and the close-out date.

# 9.5.1 Responsibility

The Site Manager is responsible for ensuring that the appropriate management response and handling procedures are instigated and carried through in the event of an incident and/or non-compliance. All employees, contractors and subcontractors are to:

- Notify the Site Manager of any hazard or potential hazard that may result in an incident and/or noncompliance, regardless of the nature or scale; and
- Take immediate action (where it is safe to do so) to prevent, stop, contain and/or minimise any adverse impact associated with an incident and/or non-compliance.

The induction and toolbox talks will be used to ensure all site employees, contractors and subcontractors are aware of and understand their obligations for incident and/or non-compliance response.

### 9.5.2 Notification Requirements

#### **9.5.2.1** Incidents

Section 147 of the POEO Act defines material harm as:

- (a) harm to the environment is material if:
- (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or
- (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (or such other amount as is prescribed by the regulations), and
- (b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Notification responsibilities for incidents that have caused or threaten to cause material harm to the environment are detailed in Section 148 of the POEO Act. In summary, these are broadly categorised as:

Page 67 of 105 CSR Limited



## Duty of an employee or any person undertaking an activity:

Any person engaged as an employee or undertaking an activity with regard to the project will, immediately after becoming aware of any potential incident (even if outside of normal business hours), notify the Site Manager of the incident and all relevant information about it. The Site Manager will be available 24 hours a day, seven days a week and have the authority to stop or direct works.

### Duty of an employer or occupier of the premises to notify:

The employer or occupier of the premises (in this case, the Site Manager) on which the incident occurred, who is notified (or otherwise becomes aware of) of the incident, will immediately notify the relevant authorities about the incident and all relevant information.

Under the POEO Act, "relevant authority" means any of the following:

- The appropriate regulatory authority DPI&E and/or the EPA;
- If DPI&E an/or the EPA is not the appropriate regulatory authority the local authority for the area in which the pollution incident occurs (i.e. Council);
- NSW Public Health Unit;
- SafeWork NSW; and
- Fire and Rescue NSW.

Table 21 lists the contact details for these authorities. The person reporting the pollution incident will provide the following key details:

- Location of the pollution incident/emergency;
- Nature of the pollution incident/emergency;
- Their name and contact details; and
- Details of any required assistance.

Table 21 Relevant authorities

Authority	Contact	Details
DPI&E	Compliance Unit	1300 305 695 or 02 9228 6111
		compliance@planning.nsw.gov.au
EPA	Environment Line	131 555
		info@environment.nsw.gov.au
	Head office (Sydney)	02 9995 5000
Liverpool City Council	Main switchboard	1300 36 2170
NSW Public Health Unit	Western Sydney Local Health District	(02) 8890 5555
SafeWork NSW	Incident Notification Hotline	131 050
		Select Option 3 to report a "Serious Incident or Fatality" – this will result

Page 68 of 105 CSR Limited



		in the incident being recorded and the appropriate person being contacted.
Emergency Services	NSW Police	131 444
	NSW Fire and Rescue	1300 729 579
	NSW Ambulance Service	Emergency: 000
Division of Resources and Geosciences, Mine Safety and/or		1300 814 609
Environment Sustainability Unit		cau@planning. <b>nsw</b> .gov.au
Community Consultation Committee		TBC

Once becoming aware of an incident, CSR will immediately (within 24 hours) notify the DPI&E, via the Major Projects website, and other relevant agencies if an incident, or potential incident, causes (or may cause) harm to the environment. The notification must identify the development (including the development application number and the name of the development if it has one) and set out the location and nature of the incident.

### 9.5.2.2 Non-compliances

DPI&E will be notified via the Major Projects website within seven days of becoming aware of any non-compliance.

A non-compliance notification will identify the development and the application number for it, set out the condition of consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

### 9.5.3 Incidents and non-compliance procedure

Upon becoming aware of an incident and/or non-compliance, the procedure outlined below will be followed.

#### 1. Preventative action

Where possible and safe to do so, immediate action will be taken to prevent, stop, contain and/or minimise the environmental impact of the incident and/or non-compliance.

In the unlikely event that an incident and/or non-compliance requires the evacuation of the site, actions will be completed in accordance with evacuation procedures. All employees and contractors are to be made aware of the location of emergency assembly areas through site inductions, signage and regular toolbox talks.

### 2. Assistance

Page 69 of 105 CSR Limited



If adequate internal resources are not available and the incident and/or non-compliance threatens public health, property or the environment, it is essential that Fire and Rescue NSW be contacted by telephoning "000" for emergency assistance.

Contacting Fire and Rescue NSW does not negate the notification requirements in the above table.

#### 3. Notify

Under the provisions of the POEO Act, there is a duty to notify any incident that has caused or threatens to cause material harm to the environment and all relevant information about the incident. The specific duties to notify are outlined above.

If there is a serious incident or emergency, it is more than likely that Fire and Rescue NSW will take control and manage the required investigation and remedial activities. Any instructions issued will be strictly adhered to.

DPI&E and other relevant authorities be provided with a written incident notification via the Major Projects website within 24 hours after the incident.

#### A written notification will:

- Identify the development and application number;
- Provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
- Identify how the incident was detected;
- Identify when the Applicant became aware of the incident;
- Identify any actual or potential non-compliance with conditions of consent;
- Describe what immediate steps were taken in relation to the incident;
- Identify further action(s) that will be taken in relation to the incident; and
- Identify a project contact for further communication regarding the incident.
- Non-compliances will be notified in accordance with Section 9.2.2.2.

### 4. Investigate

Immediately investigate the cause of the incident and/or non-compliance.

### 5. Remedial action

Address the cause of the incident and/or non-compliance and mitigate any further environmental impact. In some instances, outside resources such as specialist contractors/consultants may be required.

#### 6. Record

It is imperative that an honest assessment of the situation is carried out and documented in order to minimise the potential for similar events in the future. On this basis, every incident is to be recorded in an Incident Report. A copy of the completed report will be maintained for at least five years.

A detailed incident report be provided to the DPI&E within 30 days of the incident occurring.

The detailed incident report will include:

A summary of the incident.

Page 70 of 105 CSR Limited



- o Outcomes of an incident investigation, including identification of the cause of the incident.
- Details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence.
- o Details of any communication with other stakeholders regarding the incident.
- All non-compliances are recorded.

#### 7. Preventative action

Once the incident and/or non-compliance has been suitably handled, appropriate measures will be identified and implemented to reduce the possibility of re-occurrence.

### 9.5.4 Incidents and non-compliance register

An Incidents and Non-Compliance Register will be maintained and will contain the following:

- A copy of the environmental incident and non-compliance notification requirements and handling procedure described above.
- Site evacuation procedures.
- A separate reference sheet containing the contact details for the site contacts and the contact details for the regulatory authorities listed in Section 9.2.2.
- Blank hard copies of the Incident Report.
- Copies of all completed Incident Reports which are to be maintained for at least five years after the event to which they relate.

#### 9.5.5 Minor environmental incidents

There is the possibility of minor environmental incidents occurring as part of this project. A 'minor environmental incident' is where there has been no potential or actual material harm to the environment. Examples are excessive dust sighted by the project team or a small contained hydrocarbon spill that does not leave a site boundary and are cleaned up without residual on-site environmental harm.

Minor environmental incidents will still be handled under the process outlined in Section 9.2.3 except there will be no requirement for government notification. All minor or major incidents will be recorded in the Incidents and Non-Compliance Register. A minor incident does not constitute a non-compliance with the Project Approval.

### 9.5.6 Incident reporting

Within 7 days following the incident or non-compliance, an Incident Report will be submitted to the above stakeholders including the following information:

- Time and date of the incident;
- Details of the incident and/or non-compliance (including the condition and instrument breached);
- Measures implemented, or to be implemented to ensure the event ceases and to prevent a reoccurrence;

Page 71 of 105 CSR Limited



Remediation options to be implemented and/or any other course of action taken or to be taken.

EPA and MEG require notification on specific forms that can be found on the relevant websites.

Where the incident relates to an exceedance of monitoring criteria, the results of the monitoring will be supplied to the affected landowners for the following three months as a minimum and until the results are again compliant. If the exceedance relates to an air quality criteria, the affected landowners and current tenants will be supplied with a copy of the NSW Health Fact Sheet "Mine Dust and You".

### 9.6 Independent Review

If a landowner considers the project to be exceeding the relevant criteria in the Conditions of Approval, they may ask the Secretary in writing for an independent review of the impacts of the project on their land.

If the Secretary is not satisfied that an independent review is warranted, the Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.

If the Secretary is satisfied that an independent review is warranted, within 3 months, or as otherwise agreed by the Secretary and the landowner, of the Secretary's decision, CSR will:

- a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Secretary, to:
  - i. consult with the landowner to determine his/her concerns;
  - ii. conduct monitoring to determine whether the project is complying with the relevant criteria; and
  - iii. if the project is not complying with these criteria, then identify 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.

#### 9.7 Environmental Auditing

# 9.7.1 Independent Environmental Audits

Independent environmental audits will be undertaken in accordance with the Conditions of Approval to assess the compliance of the Project with regulatory requirements during construction and operation, and will be undertaken within 12 months of commencement of the project, thence every 3 years. This audit will:

- be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
- include consultation with the relevant agencies;
- assess the environmental performance of the project and assess whether it is complying with the requirements in this approval, the EPL and the ML applicable to the site (including any assessment, plan or program required under these approvals);
- review the adequacy of strategies, plans or programs required under the abovementioned approvals;
   and

Page 72 of 105 CSR Limited



- recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals.
- The audit team will be led by a suitably qualified auditor and include experts in any field specified by the Secretary.

CSR will submit a copy of the audit report within 12 weeks of commencing the audit, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

CSR will ensure that records are kept of all auditing that is conducted. Based on results of the audits, CSR management and HSE Personnel will conduct reviews and where practicable implement any recommended corrective actions towards identified environmental impacts or concerns of the project.

### 9.7.2 Rehabilitation Progress Audit

The effectiveness of the measures implemented to address all aspects of rehabilitation as described in the RMP will be independently audited as described in the Plan.

#### 9.8 Environmental complaints

#### 9.8.1 Environmental Complaints

In the event of a third-party environmental complaint the following, the CSR policy will be followed which involves:

- assessing whether it threatens the environment or not,
- follows the implement pollution incident management plan and commences notification protocol
- as well as commence verbal notifications to relevant external authorities
- investigates and verifies complaints, and assesses if excessive off-site impacts have occurred.
- implements corrective measures including modification of execution methods and operational techniques to avoid recurrence or minimise ongoing adverse impacts.
- completes monitoring/ additional investigations to verify the adequacy of the recommendations, as required.
- notifies the complainant of actions taken; and
- continues to monitor activity, if required.

#### 9.8.2 Responsibility

The Community Liaison Manager is responsible for ensuring that the appropriate management response and handling procedures are instigated and carried through in the event of an environmental complaint. The induction and toolbox talks will be used to ensure all site employees are aware of and understand their obligations for complaints response.

All employees who take receipt of a complaint, either verbal or written, are to immediately notify the Site Manager.

Page 73 of 105 CSR Limited



#### 9.8.3 Procedure

### 1. Record and acknowledge

Any employee who receives a complaint, either verbal or written, is to immediately notify the Community Liaison Manager.

In the normal course of events, the first contact for complaints will usually be made in person or by telephone. The complainant's name, address and contact details, along with the nature of the complaint, will be requested. If the complainant refuses to supply the requested information, a note will be made on the form and the complainant advised of this.

#### 2. Assess and prioritise

The Community Liaison Manager will prioritise all complaints by considering the seriousness of the complaint including risk to health and safety and will attempt to provide an immediate response via phone or email.

#### 3. Investigate

A field investigation will be initiated to confirm details relevant to the complaint and the cause of the problem. Any monitoring information and/or records at and around the time of the complaint will be reviewed for any abnormality or incident that may have resulted in the complaint.

If the complaint is due to an incident, the notification requirements and handling procedures outlined in Section 9.2 will be followed.

#### 4. Action or rectify

Once the cause of the complaint has been established, every possible effort will be made to undertake appropriate action to rectify the cause of the complaint and mitigate any further impact. The Community Liaison Manager will assess whether the complaint is founded or unfounded and delegate the remediation, as required.

### 5. Respond to complainant

The Community Liaison Manager will oversee the rectification of the issue and respond to the complainant once the issue has been resolved. The complainant will be provided with a follow up verbal response on what action is proposed. Where a complaint cannot be resolved by the initial or follow-up verbal response, a written response will be provided to the complainant.

#### 6. Record

Every complaint received is to be recorded in the Complaints Register, which will be uploaded to the website within 3 months of the determination of Modification 3 and 4 and will be updated monthly.

#### 7. Preventive action

Once the complaint has been suitably handled, appropriate measures will be identified and implemented to negate the possibility of re-occurrence. The complaint is not closed out and the Complaints Register is not finalised until the preventative actions are completed and recorded.

Page 74 of 105 CSR Limited



#### 9.8.4 Dispute Resolution

The dispute resolution process meets the requirements of the Work Health and Safety Regulation 2011.

If there is a dispute that arises between CSR and Council or a public authority, in relation to an applicable requirement in the Project Approval or relevant matter relating to construction or operation of the project, either party may refer the matter to the Planning Secretary for resolution. The Planning Secretary's determination of any such dispute will be final and binding on the parties.

In the case of a dispute between CSR and a community member/complainant, either party may refer the matter to the DPI&E and/or relevant regulatory authority for consideration, advice and/or negotiation. If the matter escalates, a third party mediator may be required.

#### 9.9 Other Notification Requirements

#### 9.9.1 Out-of-hours Works

The following activities may be undertaken outside of permissible operating hours. When this occurs, CSR will notify the DPI&E and affected residents prior to undertaking the activities, or as soon as practical thereafter.

- Activities that are inaudible at residences on privately-owned land;
- The delivery or dispatch of materials as requested by the NSW Police Force or other public authorities for safety reasons; or
- Emergency work to avoid the loss of life, property or to prevent material harm to the environment.

### 9.9.2 Written report to EPA

Where an authorised officer of the EPA suspects on reasonable grounds that an event has occurred at the premises, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises), the authorised officer may request a written report of the event.

CSR will make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

The request may require a report which includes any or all of the following information:

- a) the cause, time and duration of the event;
- b) the type, volume and concentration of every pollutant discharged as a result of the event;
- c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
- d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and

Page 75 of 105 CSR Limited



g) any other relevant matters.

## 9.9.3 Discovery of Human Remains

If human remains are discovered on the site, then all work in the area surrounding the discovery will cease, and the area will be secured. CSR will immediately notify the NSW Police Force and BCD, and work will not recommence in the area until authorised by the NSW Police Force and BCD.

### 9.9.4 Unexpected Heritage Find

If any potential Aboriginal object or Aboriginal place is identified on the site, or suspected to be on the site:

- a) all work in the immediate vicinity of the object or place will cease immediately;
- b) a 10 m buffer area around the object or place must be cordoned off; and
- c) BCD will be contacted immediately.

Work in the immediate vicinity of the find will only recommence if:

- a) the object or place is confirmed by BCD upon consultation with the Registered Aboriginal Parties not to be an Aboriginal object or Aboriginal Place;
- b) the Aboriginal Heritage Management Plan (AHMP) is revised to include the object or place and appropriate measures in respect of it; or
- c) the Secretary is satisfied with the measures to be implemented in respect of the object or place and makes a written direction in that regard.

#### 9.9.5 High Impact Noise Activities

Where high impact noise activities are proposed on the site, such as those likely to generate noise levels above  $LA_{eq}$  75 dB(A) or activities likely to generate noise with intermittent, impulsive, tonal or low-frequency characteristics are required during the construction of the noise berm, adjacent sensitive receivers will be appropriately notified prior to works commencing and respite periods will be implemented.

### 9.9.6 Breach of Water Licence Conditions

Once the approval holder becomes aware of a breach of any condition on the water approval or licence, the approval holder must notify NRAR as soon as practicable by:

- email: nrar.enquiries@nrar.nsw.gov.au, and/or
- telephone: 1800 633 362.

Any notification by telephone must also be confirmed in writing within seven (7) business days of the telephone call.

Page 76 of 105 CSR Limited



## 10 Community Consultation Procedures

CSR will establish and operate a Community Consultative Committee (CCC) for the project prior to recommencing quarrying operations. It will be operated in general accordance with the DPI&E's Community Consultative Committee Guidelines, as updated from time to time.

The Community and Stakeholder Consultation Plan (CCP) describes procedures to:

- keep the local community and relevant agencies informed about the operation and environmental performance of the project;
- receive, record, handle and respond to complaints; and
- resolve any disputes that may arise during the course of the project.

Page 77 of 105 CSR Limited



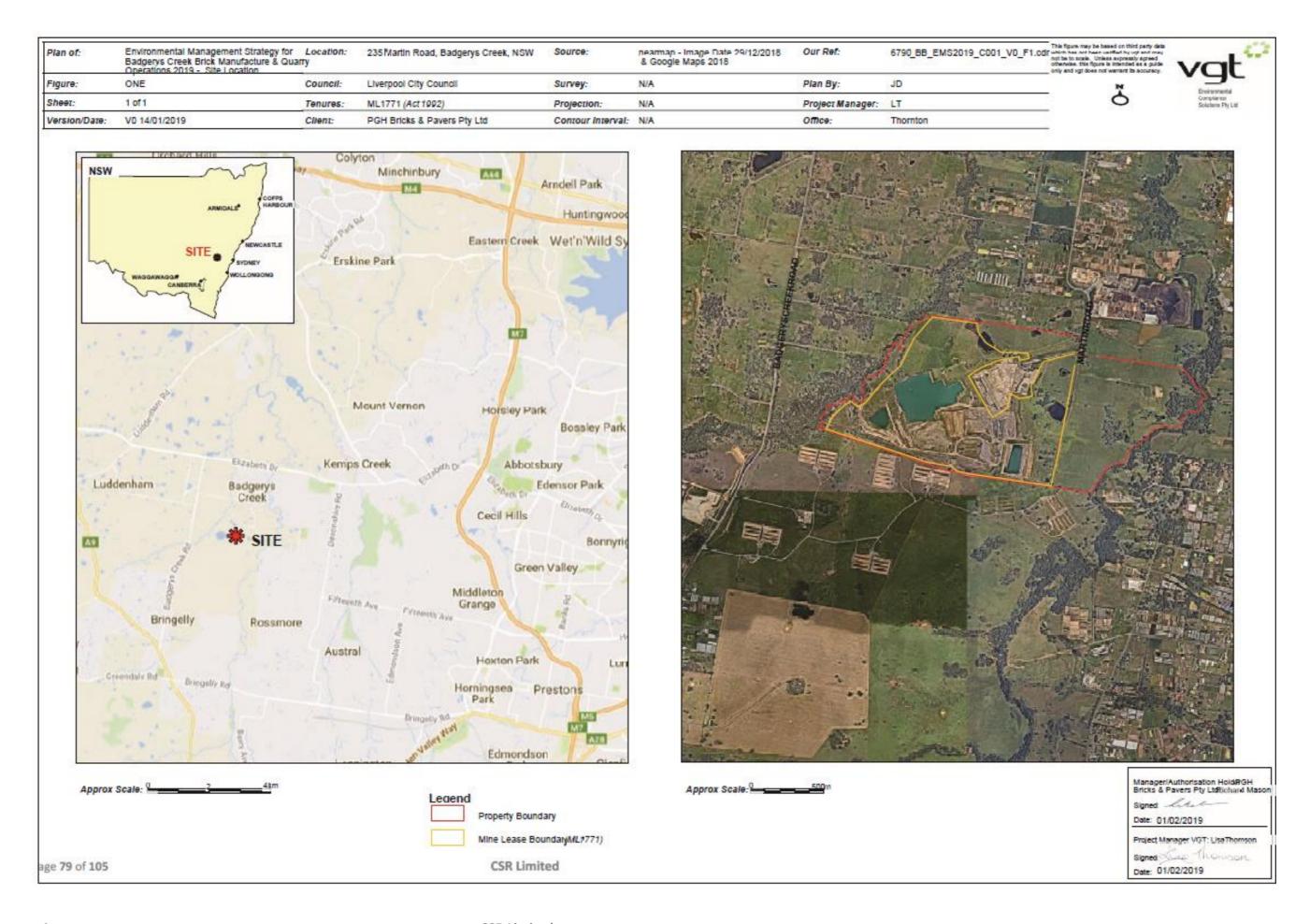
## 11 Reference

Element Environmental. (February 2019). Environmental Assessment, CSR Advanced manufacturing hub – Modification 3 & 4.

Approval by Minister for Planning and Infrastructure (August 2020) Badgerys Creek Quarry and Brick Making Project

Page 78 of 105

### **FIGURE 1 - SITE LOCATION**



Page **79** of **105** CSR Limited



### FIGURE 2 - PROJECT LAYOUT

Overview of Preferred Project

## CSR ADVANCED MANUFACTURING HUB

Modification 3 and 4

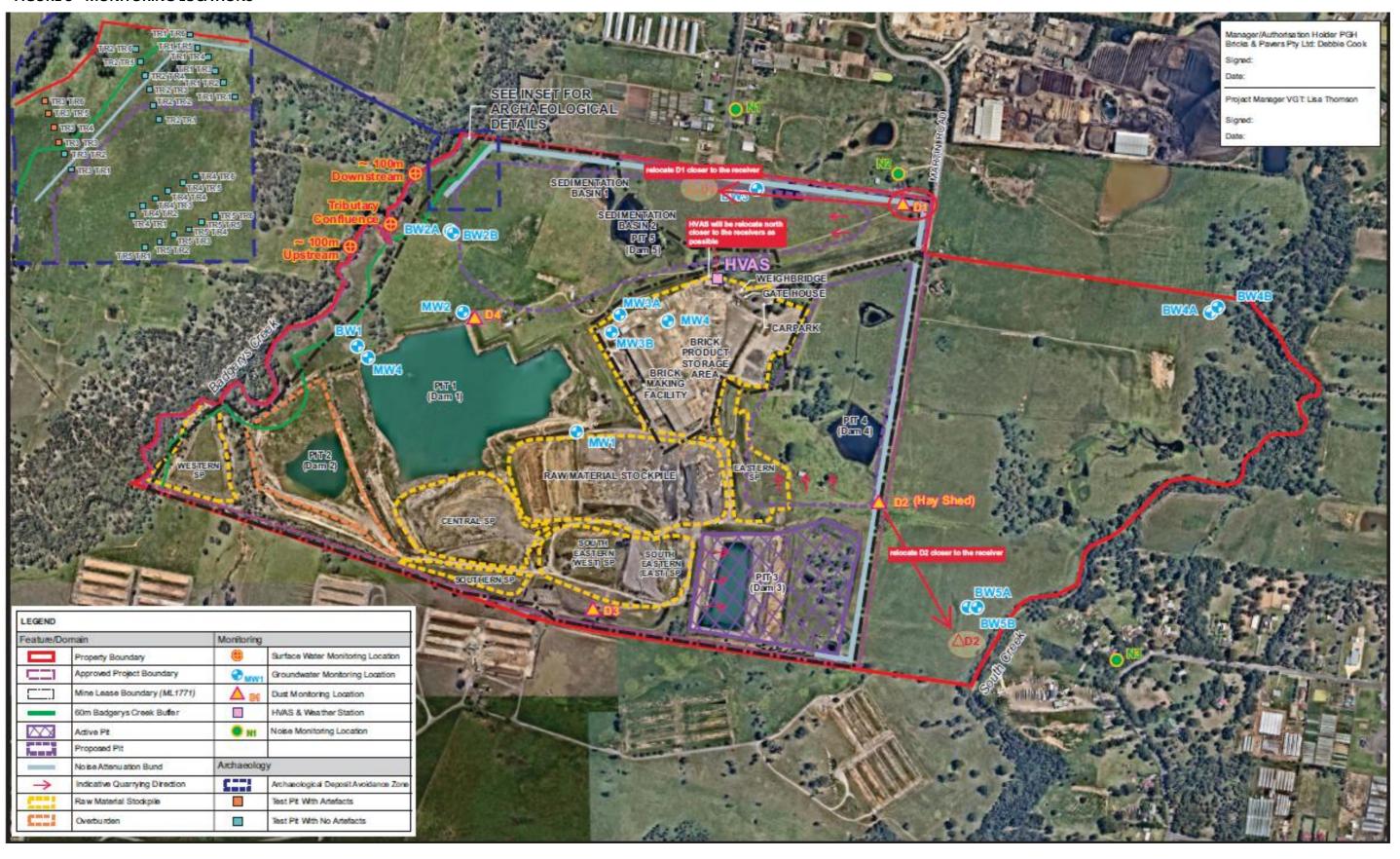




Page 80 of 105 CSR Limited

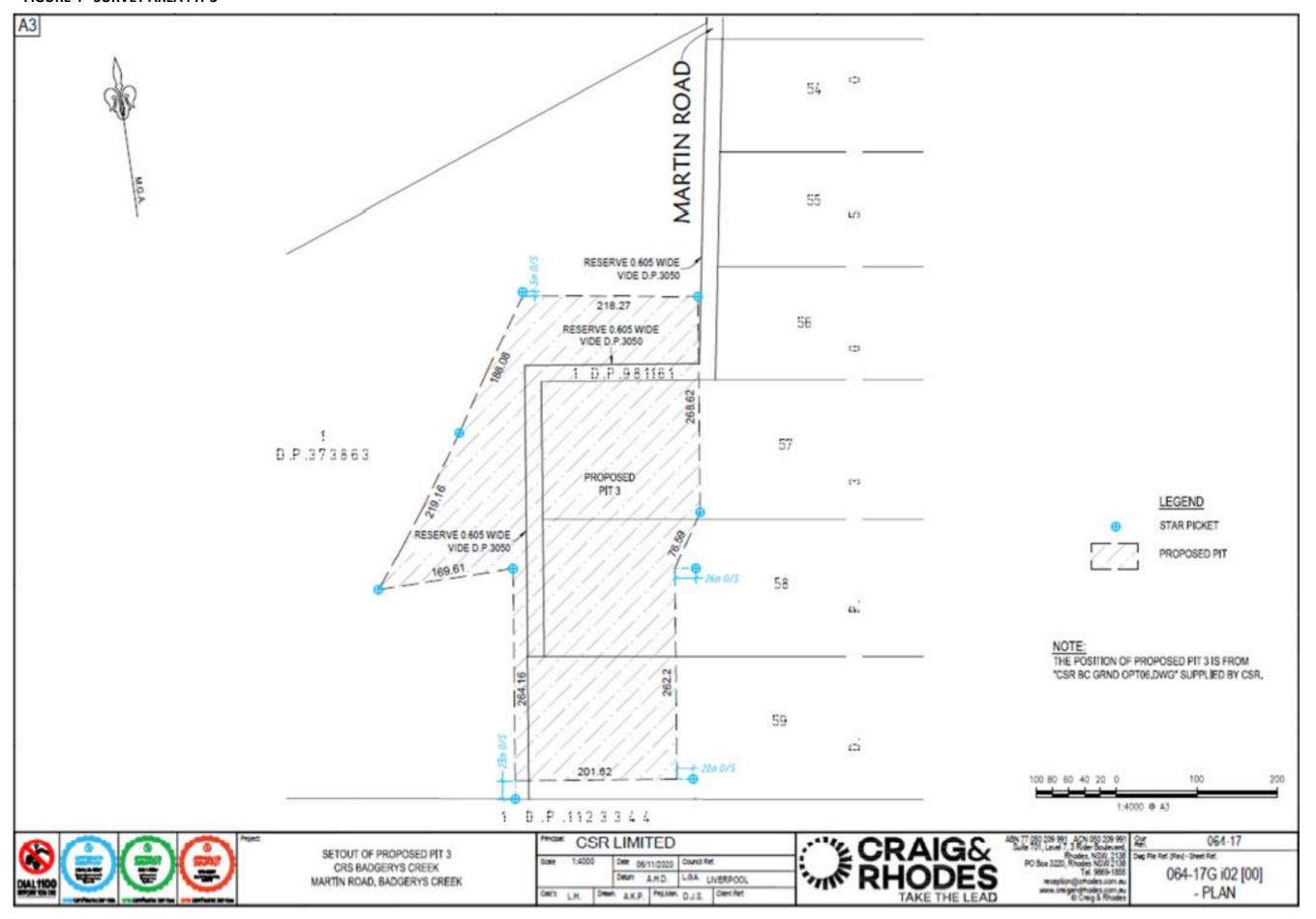


## **FIGURE 3 - MONITORING LOCATIONS**



Page 81 of 105 CSR Limited

### FIGURE 4 – SURVEY AREA PIT 3



Page 82 of 105 CSR Limited



## APPENDIX A CONDITIONS OF APPROVAL

Page 83 of 105 CSR Limited



# APPENDIX B ENVIRONMENT PROTECTION LICENCE

Page 84 of 105 CSR Limited



## APPENDIX C MINING LEASE

Page 85 of 105



# APPENDIX D WATER APPROVAL AND LICENCE

Page 86 of 105 CSR Limited



# APPENDIX E ENFORCEABLE UNDERTAKING

Page 87 of 105 CSR Limited



# APPENDIX F NOISE MANAGEMENT PLAN

Page 88 of 105 CSR Limited



# APPENDIX G AIR QUALITY MANAGEMENT PLAN

Page 89 of 105



# APPENDIX H SOIL AND WATER MANAGEMENT PLAN

Page 90 of 105



# APPENDIX I GROUNDWATER MANAGEMENT PLAN

Page 91 of 105 CSR Limited



## APPENDIX J TRAFFIC MANAGEMENT PLAN

Page 92 of 105 CSR Limited



# APPENDIX K ABORIGINAL HERITAGE MANAGEMENT PLAN

Page 93 of 105 CSR Limited



# APPENDIX L REHABILITATION MANAGEMENT PLAN

Page 94 of 105 CSR Limited



# APPENDIX M WASTE MANAGEMENT PLAN

Page 95 of 105 CSR Limited



# APPENDIX N COMMUNITY AND STAKEHOLDER CONSULTATION PLAN

Page 96 of 105 CSR Limited



# APPENDIX O MINING OPERATIONS PLAN

Page 97 of 105 CSR Limited



# APPENDIX P EMERGENCY MANAGEMENT RESPONSE PLAN

Page 98 of 105



# APPENDIX Q VISUAL IMPACT MANAGEMENT PLAN

Page 99 of 105



# APPENDIX R VENM MANAGEMENT PLAN

Page 100 of 105 CSR Limited



## APPENDIX S DE-WATERING INFRASTRUCTURE PLAN

Page 101 of 105 CSR Limited



# APPENDIX T DE-WATERING MANAGEMENT PLAN

Page 102 of 105 CSR Limited



# APPENDIX U FAUNA RELOCATION MANAGEMENT PLAN

Page 103 of 105 CSR Limited



# APPENDIX V EVACUATION PLAN

Page 104 of 105 CSR Limited



## **APPENDIX W**

## **ENVIRONMENTAL RISK REGISTER**

Page 105 of 105 CSR Limited