



**September
2021**

**Annual Review
for
Bringelly Clay / Shale Mine
ML 1731 (Act 1992)
Year Ending 30th June 2021**



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Bringelly Clay Mine Annual Review and Annual Rehabilitation Review	
Name of Mine	Bringelly Clay / Shale Mine
MOP Commencement Date	27 th April 2016
MOP Completion Date	31 st March 2023
Mining Authorisations	ML1731
Mine Lease Grant Date	9 th March 2016
ARR Commencement Date	1 st January 2020
ARR Completion Date	30 th June 2021
Annual Review Commencement Date	1 st July 2020
Annual Review Completion Date	30 th June 2021
Name of Authorisation Holder	PGH Bricks & Pavers Pty Ltd
Name of Mine Operator (s)	PGH Bricks & Pavers Pty Ltd
Name and Contact Details of the Mine Manager	Mr Joe Gauci, (02) 9826 3964 jgauci@pghbricks.com.au
Name and Contact Details of the Environmental Representative	Tony Hunt, 0468 534 059 TOHunt@pghbricks.com.au
Name of the Representative of the Authorisation Holder	Mr Joe Gauci, (02) 9826 3964 jgauci@pghbricks.com.au

Revision Table

Date	Version	Author	Reviewed	Approved
21/09/2021	D0	TO	LT/GJ/TW/TH	TO
27/09/2021	F0	TO	LT	TO

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1 Executive Summary

This Annual Review (AR) has been prepared by VGT Environmental Compliance Solutions Pty Ltd (VGT) on behalf of PGH Bricks & Pavers Pty Ltd for the Bringelly Clay / Shale Mine (ML1731). This report describes the mining and rehabilitation activities as well as the environmental monitoring results for the reporting period from 1st January 2020 to 30 June 2021. Compliance with the conditions of consent SSD 5684 Mod 1, as activated on the 24th of February 2020, are considered from the 1st July 2020 to 30th June 2021. The differing dates are to bring into alignment the two reporting requirements.

There has been no mining or rehabilitation activities during the extended report period. Brickmaking has continued at a similar rate to previous years. Environmental monitoring has continued in accordance with approved management plans.

There are 5 non-compliances in the period 1st July 2020 to 30th June 2021, summarised in section 3. Transport exceeded daily truck count limits on three days in November 2020. The Department was notified on 27th November and has issued a warning. The High Volume Air Sampler recorded an exceedance of the 24 hour PM₁₀ criteria on 11th April 2021. The Department and nearby residents were not notified, resulting in 2 additional non-compliances. Not all conditions were compliant, resulting in a non-compliance of schedule 2 condition 2.

2 Introduction

2.1 PROJECT SITE

PGH Bricks & Pavers Pty Ltd Bringelly Clay / Shale Mine located off Greendale Road, in the Camden Council Government Area, Bringelly NSW. The site is approximately 18km west of Liverpool, as presented in *Figure One*. The site is constituted of the active mine and brickworks, situated on Lot 100, DP 1203966. The mine and associated brickworks are freehold owned and operated by PGH Bricks & Pavers Pty Ltd.

2.2 BACKGROUND

The report serves to ascertain compliance over the reporting period of 1st July 2020 to 30th June 2021 with the SSD_5684 Mod 1 conditions of consent for the Annual Review (AR) (Schedule 5, Condition 4) reporting requirements to DPIE.

The report also serves to review the environmental performance of the site in order to comply with mine lease conditions (Condition 3. (f)). PGH was granted a change in the reporting period for the Annual Rehabilitation Report (ARR) by the Resources Regulator in order to align the report period with the AR (see *Appendix M*). It was requested by the Regulator that this reporting period cover an 18-month period (1 January 2020 to 30 June 2021), with subsequent reports covering a financial year period.

2.3 QUARRY CONTACTS

Table 1. Contact Details

Aspect	Brickworks Manager	Mine Manager:
Name	Tony West	Joe Gauci
Company	PGH Bricks & Pavers Pty Ltd	PGH Bricks & Pavers Pty Ltd
Address	Greendale Road	59-67 Cecil Road
	Bringelly	Cecil Park
Mobile	0419 474 953	0437 832 572
Phone	02 9684 8778	02 9826 3952
Email	twest@pghbricks.com.au	jgauci@pghbricks.com.au

3 Statement of Compliance

Table 2. Statement of Compliance

Relevant Approval	All Conditions Compliant?
SSD_5684 Mod 1	No
EPL1808	Yes
ML1771	Yes
Water Licences	Yes

A full list of conditions and compliance status is included in *Appendix H*.

3.1 SUMMARY OF NON-COMPLIANCES

3.1.1 SSD_5684 Mod 1

There were five non-compliances noted for the Mod 1 conditions.

Table 3. SSD_5684 Mod 1 Non- Compliances

Number	Condition	Compliance Status	Issue	Where Addressed in this Report
Schedule 2-Condition 2	The Applicant must: (a) carry out the development generally in accordance with the EIS and SEE (Mod 1); and (b) the conditions of this consent.	Non-Compliant	There were a number of non-compliances noted, therefore the development has not complied with all conditions of consent	Appendix H Section 7.2 Section 7.11 Section 12
Schedule 2-Condition 7	The Applicant must not: (a) transport more than 263,500 tonnes of bricks from the site in a calendar year; (b) receive more than 90 trucks to the site per day or more than 18 trucks per hour; and (c) dispatch more than 90 trucks from the site per day or more than 18 trucks per hour.	Non-Compliant	The daily count was exceeded on the 10/11/2020 with 101 trucks recorded (64 due to finished goods and 37 due to raw materials). The daily count was also exceeded on the 16/11/2020 with 94 trucks recorded (71 due to finished goods and 23 due to raw materials). The next exceedance was recorded on the 17/11/2020 with 93 trucks (66 due to finished goods and 27 due to raw materials). This was due to a large relocation of inventory, exacerbated by truck scheduling and impacted by wet weather in preceding weeks. DPIE was notified on 27/11/2020 of exceedances and acknowledgment email from DPIE received dated 10/12/2020. (Element Audit 2021). DPIE issued a Warning Letter on the 14th January 2021.	Appendix H Section 7.11

Number	Condition	Compliance Status	Issue	Where Addressed in this Report																																											
Schedule 3-Condition 7	<p>The Applicant must implement all reasonable and feasible avoidance and mitigation measures so that particulate matter emissions generated by the development do not exceed the criteria in Tables 3 to 6 at any residence on privately-owned land.</p> <div><p>Table 3: Long-Term Criteria for Particulate Matter</p><table><tr><th>Pollutant</th><th>Averaging period</th><th># Criterion</th></tr><tr><td>Total suspended particulates (TSP)</td><td>Annual</td><td>*60 µg/m³</td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>Annual</td><td>*30 µg/m³</td></tr></table><p>Table 4: Short-Term Criteria for Particulate Matter</p><table><tr><th>Pollutant</th><th>Averaging period</th><th># Criterion</th></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>24 hour</td><td>*50 µg/m³</td></tr></table><p>Table 5: Long-Term Criteria for Deposited Dust</p><table><tr><th>Pollutant</th><th>Averaging Period</th><th>Maximum increase in deposited dust level</th><th>Maximum total deposited dust level</th></tr><tr><td>Deposited dust</td><td>Annual</td><td>*2 g/m²/month</td><td>*4 g/m²/month</td></tr></table><p>Table 6: Long and Short-Term Stack Emissions</p><table><tr><th>Pollutant</th><th>Averaging period</th><th># Criterion</th></tr><tr><td rowspan="4">Sulphur Dioxide</td><td>10-minute</td><td>712 µg/m³</td></tr><tr><td>1-Hour</td><td>570 µg/m³</td></tr><tr><td>24-Hour</td><td>228 µg/m³</td></tr><tr><td>Annual</td><td>80 µg/m³</td></tr><tr><td rowspan="2">Nitrogen Dioxide</td><td>1-Hour</td><td>246 µg/m³</td></tr><tr><td>Annual</td><td>62 µg/m³</td></tr><tr><td>Hydrogen Chloride</td><td>1 hour</td><td>0.14 mg/m³</td></tr></table><p>Notes to Tables 3-6:</p><ul style="list-style-type: none">* Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).* Incremental impact (i.e. incremental increase in concentrations due to the development on its own).* 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.* Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Secretary in consultation with EPA.</div>	Pollutant	Averaging period	# Criterion	Total suspended particulates (TSP)	Annual	*60 µg/m³	Particulate matter < 10 µm (PM ₁₀)	Annual	*30 µg/m³	Pollutant	Averaging period	# Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	*50 µg/m³	Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level	Deposited dust	Annual	*2 g/m²/month	*4 g/m²/month	Pollutant	Averaging period	# Criterion	Sulphur Dioxide	10-minute	712 µg/m³	1-Hour	570 µg/m³	24-Hour	228 µg/m³	Annual	80 µg/m³	Nitrogen Dioxide	1-Hour	246 µg/m³	Annual	62 µg/m³	Hydrogen Chloride	1 hour	0.14 mg/m³	Non-Compliant	The 24-hour period PM ₁₀ limit was exceeded once on the 11/4/2021 due to high winds.	Section 7.2
Pollutant	Averaging period	# Criterion																																													
Total suspended particulates (TSP)	Annual	*60 µg/m³																																													
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Hydrogen Chloride	1 hour	0.14 mg/m³																																													
Schedule 4Condition 1	As soon as practicable after obtaining monitoring results showing an exceedance of any relevant criteria in schedule 3, the Applicant must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria.	Non-Compliant	PM ₁₀ was exceeded once for the 24-hour maximum and no affected landowners notified.	Section 7.2																																											
Schedule 5Condition 7	The Applicant must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Non-Compliant	PM ₁₀ exceedance was not reported to DPIE within 7 days.	Section 7.2																																											

3.1.2 EPL 1808

There were no non-compliances recorded for the EPL over the reporting period.

3.1.3 Mine Lease

There were no non-compliances recorded for the mines lease conditions.

3.1.4 Water Licences

There were no non-compliances recorded for the water licence conditions.

4 Approvals

4.1 LOCAL COUNCIL

Development consent for the site authorised by Camden Council are shown below.

Table 4. Development Approvals

No.	Date Approved	Expires	Notes
DA 91/1194	1979	None stated in consent documentation	Modified 1991 for extension and upgrading of existing Brick Plant contains 1991 consent conditions). Surrendered (Appendix C)

4.2 DEPARTMENT OF PLANNING, INFRASTRUCTURE AND ENVIRONMENT (DPIE)

4.2.1 Development Consents

Table 5. Development Approvals

No.	Date Approved	Expires	Notes
SSD_5684	3/03/2015	01/03/2045	Extraction limit: 200,000 Tpa clay/shale Production limit: 263,500 Tonnes bricks pa Receival limit: 96,000 Tonnes raw materials for brickmaking per annum Depth restriction: RL46 m AHD See <i>Figure Seven</i> for extraction cell boundaries A through I.)
SSD_5684 Mod 1	Submitted 05/08/2016 Activated 24 th February 2020.	01/03/2045	Difference from the above: Receival Limit: 321,000 tonnes raw materials for brickmaking per annum Inclusion of noise bund construction (<i>Appendix A</i> contains Mod 1 consent conditions).

This report is to comply with Schedule 5, Condition 4 of the SSD_5684 Mod 1 Consent as reproduced in the table below.

Table 6. Annual Review Reporting Conditions

Element of Condition	Where Addressed in this Report
<p>Annual Review</p> <p>By the end of September each year, the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year;</p>	Section 5, Section 8
<p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the relevant statutory requirements, limits or performance measures/criteria; <input type="checkbox"/> the monitoring results of previous years; and <input type="checkbox"/> the relevant predictions in the documents in condition 2(a) of Schedule 2; 	Section 7
<p>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p>	Section 3, Section 3.1 and Section 7
<p>(d) identify any trends in the monitoring data over the life of the development;</p>	Section 7
<p>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p>	Section 7
<p>(f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.</p>	Section 14

4.2.2 Management Plan Approvals

The following summarises the management plans currently approved and where approval is pending or the plan is yet to be developed or updated.

Table 7. Approved Management Plans

Management Plan	DPIE Approval Date	Update Required Prior to Commencing in the Extension Area
Environmental Management Strategy (Version 4)	12/12/2019	No
Noise Management Plan (Version 4)	12/12/2019	No
Air Quality Management Plan (Version 5)	12/12/2019	No
Transport Management Plan (Version 1)	12/12/2019	No
Water Management Plan (Version 3)	12/12/2019	No
Heritage Management Plan (Version 4)	12/12/2019	No
Biodiversity Management Plan	Plan withdrawn from DPIE	Plan currently under review
Final Landuse Options Plan	-	No- Due within 2 years of commencement of development.
Rehabilitation Management Plan	16/10/2013	Yes

4.3 RESOURCES REGULATOR

The details for Mining Lease 1731 (Act 1992), held in the name PGH Bricks & Pavers Pty Ltd are shown in *Table 8*. The conditions are included in *Appendix D*. There have been no incidents or non-compliances recorded against the mine lease conditions during the reporting period. The Mine Operation Plan (MOP) required under the conditions is approved and the latest Annual Rehabilitation Report (1/1/2019 to 31/12/2019) was submitted in March 2020. An Annual Exploration Report (AER) was submitted in April 2021.

The Regulator holds a rehabilitation security (\$766,000) over the site which is reviewed annually in the ARR. This security is for the current footprint of the site and will be reviewed prior to commencement in the extension area and provided in the MOP which will be amended.

Table 8. Mining Authorisations

No.	Act	Company	Granted	Expires	Area (Ha)	Minerals
1731	1992	PGH Bricks & Pavers Pty Ltd	9 March 2016	9 March 2037	37.25	Clay/Shale

A Targeted Assessment Program was undertaken on the 15th of April 2021 to focus on the final approved landform establishment and waste management (see Appendix N). Issues raised are summarised below and will be addressed in the coming reporting period.

Observations	Recommendation
Based on discussions held with the mine staff, documents presented and field inspections undertaken as part of the assessment, the following key observations were noted by the Regulator:	
Risk Assessment – The mine has not adequately identified the range of risks associated with landform establishment and appropriate controls are not in place to facilitate sustainable rehabilitation outcomes. In particular it was observed that the risk assessment in the MOP did not adequately identify controls for managing low pH materials which may affect the final landuse outcome.	Undertake a revised risk assessment to identify all risk and risk controls (treatments) associated with mine rehabilitation and closure. The risk assessment should include information on how control effectiveness is assessed, and how updates to the risk assessment are undertaken as a result. The risk assessment needs to be specific to actual causes and controls used rather than listing management plans only. The risk assessment should include input from a suitably qualified team of appropriately skilled people representing a cross-section of the workforce and activities undertaken at the mine. It is recommended that a suitably qualified landform design specialist is involved in the next rehabilitation risk assessment review process. Guidance on the range of risks to consider can be found on the Regulator's website (https://www.resourcesregulator.nsw.gov.au/environment/compliance/regulating-risks-to-rehabilitation)
Waste material characterisation – Whilst no final landform work has yet been conducted, it was unclear how ongoing waste and soil material characterisation is undertaken. Although some previous soil testing data may be available, there does not appear to be a characterisation program in place for waste and soil materials as they become available.	Material characterisation practices should be reviewed to ensure an adequate understanding of the geochemical properties of waste material so that specialist handling and management is implemented at extraction and/or processing. The mine should also undertake regular testing of all waste and soil materials to confirm their geochemical properties. Triggers at which specialist handling and management practices are required, are to be clearly defined. These requirements should be formalised in an appropriate management plan.
Final landform design – The Resources Regulator notes that the conceptual final landform outlined in the approved Bringelly Development Consent may not be reflective of a suitable and contemporary final land use outcome for this area. It is also noted that Condition 25 of the Bringelly Development Consent requires the regular revision and submission of a Final Land Use Options Plan (FLUOP) in consultation with the Resources Regulator (formerly DRE).	The Resources Regulator would encourage PGH to engage regularly with DPIE and the Regulator during the development of the FLUOP to ensure appropriate options are identified to assist and direct the final rehabilitation effort.

4.4 ENVIRONMENT PROTECTION AUTHORITY

Environmental Protection Licence Number 1808 has been issued under the Protection of the Environment Operations Act (PoEOA) and covers works both within the ML boundary and at the Bringelly Brickworks.

The licence requires the monitoring of the discharges to air through kiln stacks and discharges to water. Stack emissions are to be monitored at the kiln for hydrogen fluoride, nitrogen oxide and total solid particles. Water is monitored at Points 1 and Point 5 for oil and grease, pH and turbidity. Only Point 5 requires conductivity to be monitored. These points are shown on *Figure Two*.

The Pollution Incident Response Management Plan (PIRMP) was not activated during the reporting period. Any relevant monitoring results are made available on the PGH website (<https://www.pghbricks.com.au/-nsw-environmental-reporting>). There were no non-compliant monitoring points during the EPL Annual Return reporting period (year ending May 2020) for the Bringelly Clay Mine, as submitted to the EPA in the Annual Return for 2021.

4.5 WATER NSW

Water NSW issued Bore Licence 10BL605770 for four monitoring bores located on the site (see *Appendix F*). Results of the groundwater monitoring are discussed in *Section 7.4*.

There are two unregulated Water Access Licences and one domestic & stock Water Access Licence (see *Appendix G*). The use of the water is specific to the work approvals attached to the WALs. No water has been drawn from the WAL's over the reporting period.

5 Operations to June 2021

5.1 EXPLORATION

An exploration drilling campaign was undertaken on the 10th March 2021. It consisted of 6 drill holes on the western portion of the current pit and the western portion of the Mine Lease referred to as 'Cell I'. Twelve test pits were also excavated in the western portion of the current pit, and the south east portion referred to as 'Cell G'. A resource assessment (VGT July 2021) was prepared utilising the current and previous exploration data and included fired properties.

The results will be reported in the 2021-2022 Annual Exploration Report.

5.2 CONSTRUCTION

No construction was undertaken during the reporting period.

5.3 MINING OPERATIONS

No mining was undertaken between January 2020 and June 2021. Previously imported clay and shale was stockpiled onto the mining bench in the west. Approximately 161,230 tonnes of raw material for brickmaking has been imported to the site during the reporting period. Mining to date has remained within the stages identified in DA11/1194 as shown in *Figure Two*. With the activation of the Mod 1 consent, mining is permitted within the Cells as shown in *Figure Seven*, once the appropriate plans have been approved. Mining is anticipated to recommence in 2022.

The Mine Lease boundary has been surveyed and permanent pegs installed. The DA11/1194 limits of extraction have been pegged and the SSD limits of extraction will be similarly marked prior to commencement in the extension area.

Photoplate 1. Pegged Mine Lease Boundary



Stockpile material from previous campaigns and imported material are stored in the stockpile area or pit floor and are limited to a maximum of 5 metres in height. The stockpiles and hardstand area are dampened via a water cart as required.

5.4 ROCK AND OVERBURDEN EMPLACEMENT

Overburden has been stored on the western side of the brickworks, located within Stage 1, as illustrated on *Figure Two*. It is not anticipated that there will be any surplus overburden material at the end of mining operations and rehabilitation.

5.5 MINERAL PROCESSING

Processing of clay occurs outside of the ML boundary within the brickworks. All raw materials won from mining on the site or imported into the Bringelly brickworks are placed in stockpiles located as shown on *Figure Two*. No processing of minerals is undertaken on the Mine Lease. The brick plant produced approximately 54,000,000 bricks during the reporting period.

5.6 TRANSPORTATION AND TRAFFIC MANAGEMENT

The Traffic Management Plan was amended as part of the Mod 1 Consent requirements and was approved on the 12th of December 2019.

5.7 CONSTRUCTION WASTE

No construction was undertaken during the AR reporting period. Typical construction wastes such as pallets, timber, concrete, and packaging are collected in bins and removed by licenced waste operators.

No changes to the waste management system have occurred during the reporting period.

5.8 OPERATIONAL WASTE

Operational wastes that may be produced on site include cardboard, timber, recycling of metals and oil, brickmaking by-products such as waste bricks. Most wastes are collected from the site by various licenced contractors, a list was provided in Section 2.3.8. of the Mine Operation Plan. Metal is taken by contractor for recycling; cardboard is stored in two bins and taken from site once week; general waste is stored in six skip bins and taken off-site once a week. In addition, once every 3 months an extra bin is ordered to take extraordinary waste (for example pallets). Oil waste is taken by a contractor and septic waste twice a week is taken by a separate contractor.

Full and broken waste fired bricks are transported offsite to other plants which utilise fired brick in their processes (pers comm. PGH Bricks). Green waste bricks are recycled through the factory.

5.9 DECOMMISSIONING AND DEMOLITION ACTIVITIES

No decommissioning or demolition activities were undertaken during the reporting period.

5.10 TEMPORARY STABILISATION

No temporary stabilisation of rehabilitation areas was undertaken during the reporting period. To assist in stability and safety, layered stockpiles are kept to a height limit of 4.5 metres.

5.11 PROGRESSIVE REHABILITATION AND COMPLETION

No progress towards final rehabilitation has been made during the reporting period and will likely not occur until later in the life of the mine. The expected direction of rehabilitation will follow cells once they are exhausted of resource.

5.12 WATER MANAGEMENT

No changes to the water management has occurred during the reporting period.

Discharge from the site has not occurred however overflows on the site from the 21st to 26th of March 2021 have been recorded due to excessive rainfall received (approximately 330mm from the 18th March to 25th March 2021). Results of the monitoring are discussed in *Section 7.3*.

5.13 HOURS OF OPERATION

The site operates under the consented hours shown below.

Table 9. Hours of Operation

HOURS OF OPERATION	
1.	The Applicant must comply with the operating hours set out in Table 1.
Table 1: Operating Hours	
Activity	Operating Hours
<ul style="list-style-type: none">• Quarrying operations• Deliveries• Dispatch of finished bricks	6am to 6pm, Monday to Friday 6am to 1pm, Saturday No activities on Sundays or Public Holidays
Brick making operations (except dispatch of finished bricks)	24 hours a day, 7 days a week
Construction activities	7am to 6pm, Monday to Friday 8am to 1pm, Saturday No construction to be undertaken on Sundays or Public Holidays

6 Actions Required from Past Reports

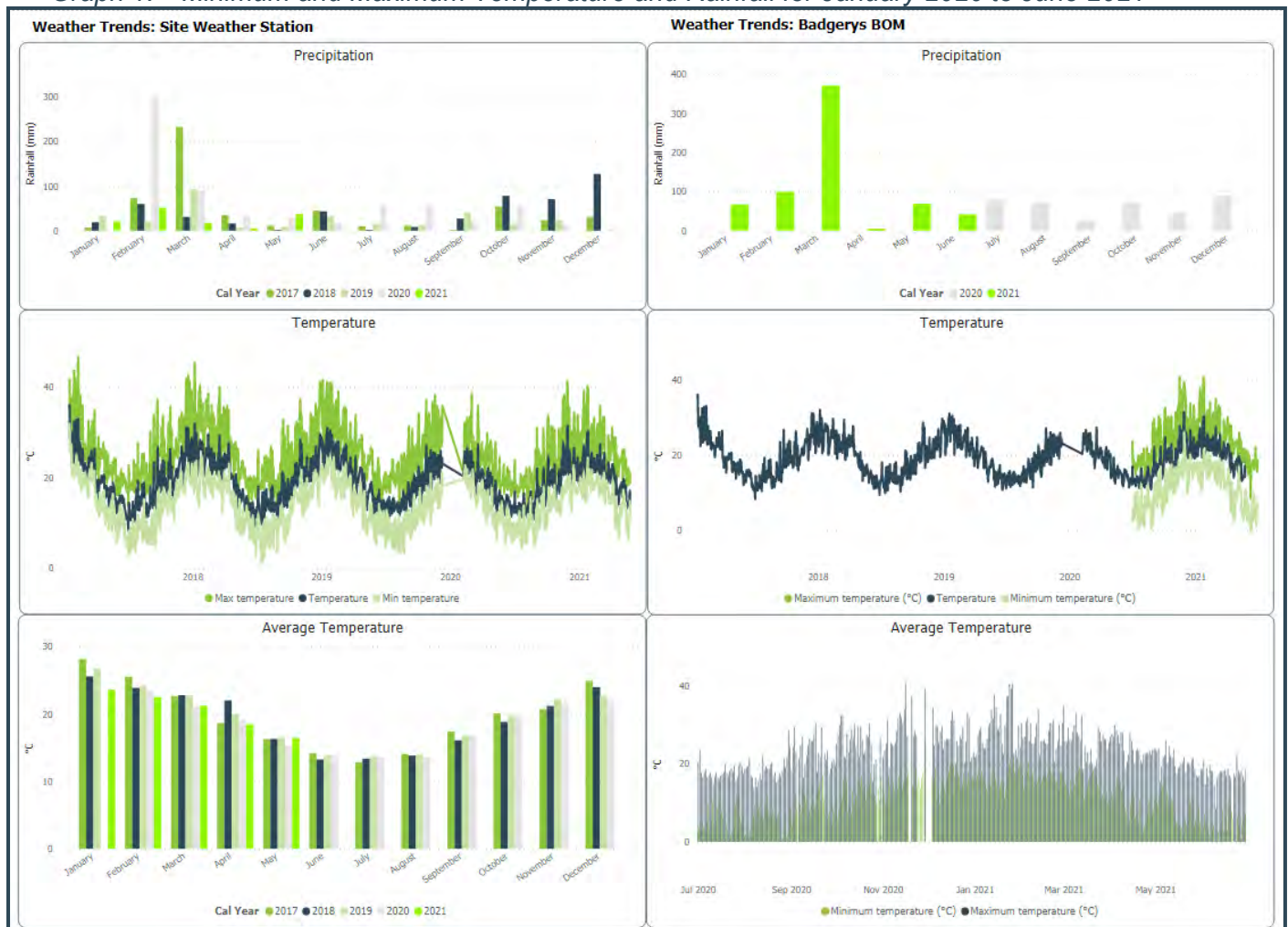
There are no actions required from the previous Annual Review. There have been previous Annual Rehabilitation Reviews (ARR) undertaken and approved by the Resources Regulator but no actions required from the previous reporting period.

7 Environmental Monitoring and Management

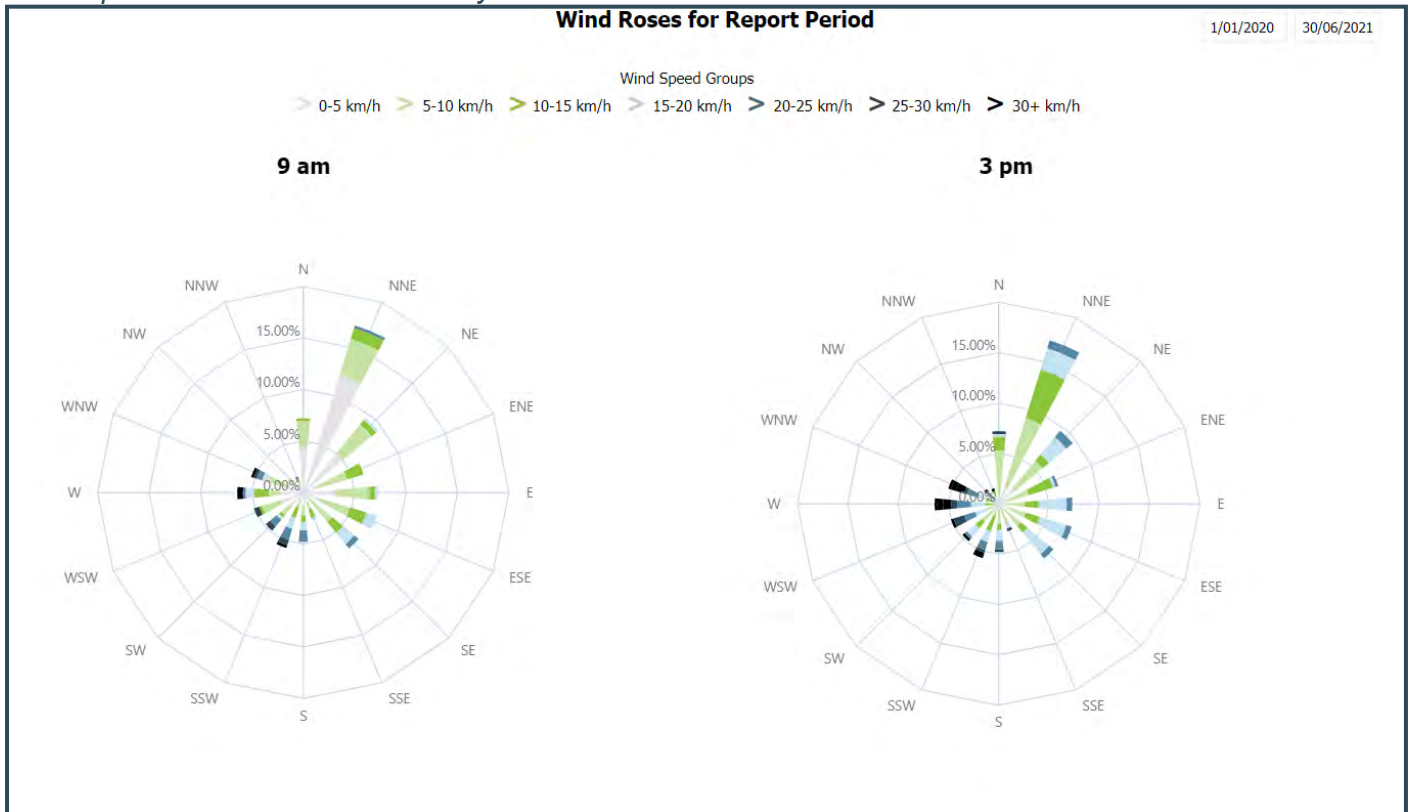
7.1 CLIMATE SUMMARY

A weather station was installed in early 2017 on the Bringelly site as per the 2015 consent requirements; data for the reporting period is shown below. It appears that the rainfall sensor from the on-site monitor has malfunctioned from around March 2021 as the high rainfall received in that month has not been recorded in comparison with the Bureau of Metrology Badgerys Creek site. Data from Badgerys Creek BOM site have been included to permit comparison where data may be incomplete.

Graph 1. Minimum and Maximum Temperature and Rainfall for January 2020 to June 2021



Graph 2. Wind Roses 1 January 2020 to 30 June 2021



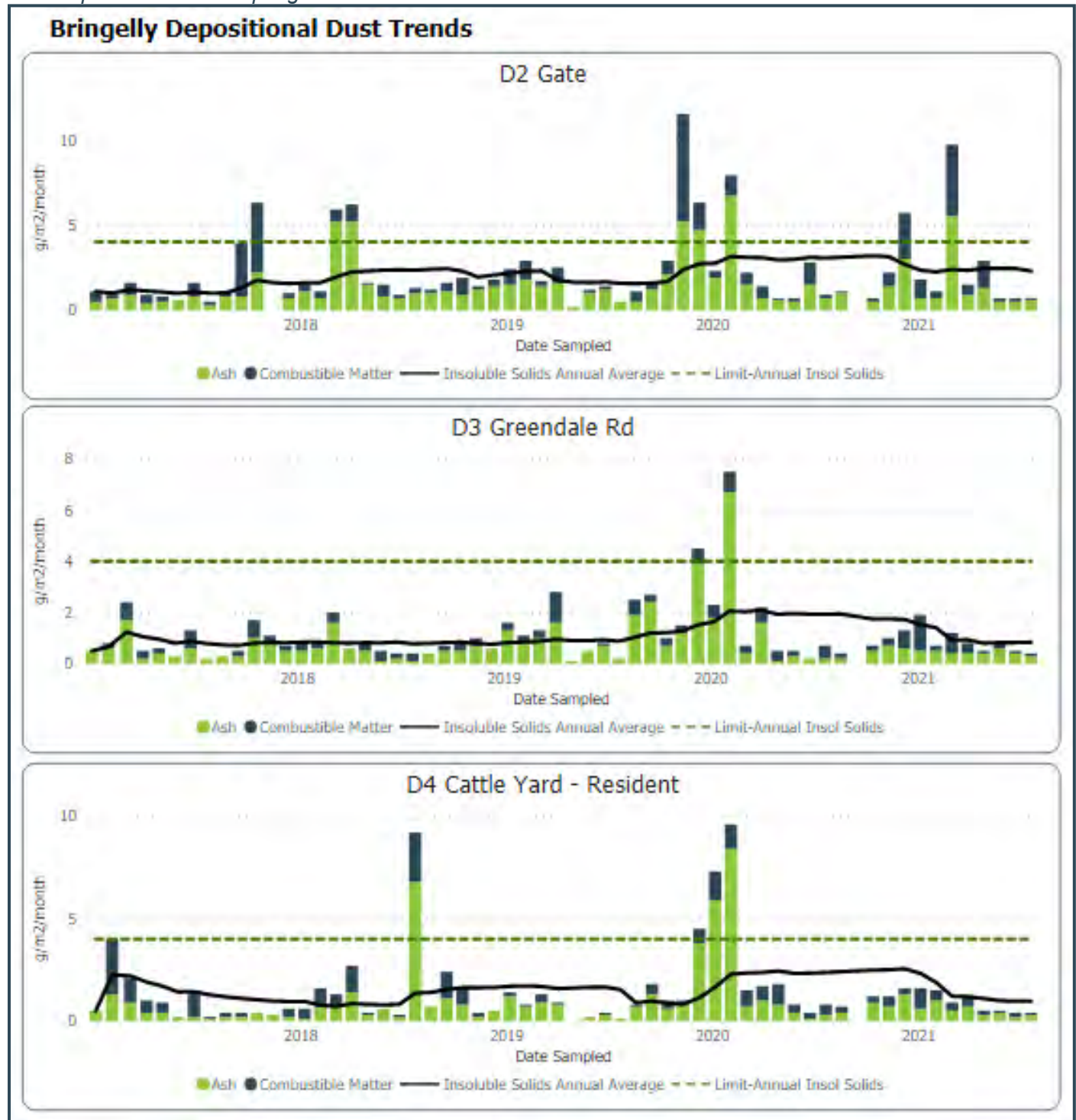
7.2 AIR QUALITY

7.2.1 Monitoring Data

7.2.1.1 Depositional Dust Gauges

Air-borne dust is monitored using static dust gauges. Results for three dust gauges during the reporting period of January 2020 to June 2021 period are included in *Graph 3* below. The dusts were sampled from three locations, as shown on *Figure Two*.

Graph 3. Dust Sampling Results



Depositional Dust Gauge Long Term Criteria are stated in the Mod 1 conditions of consent and reproduced below.

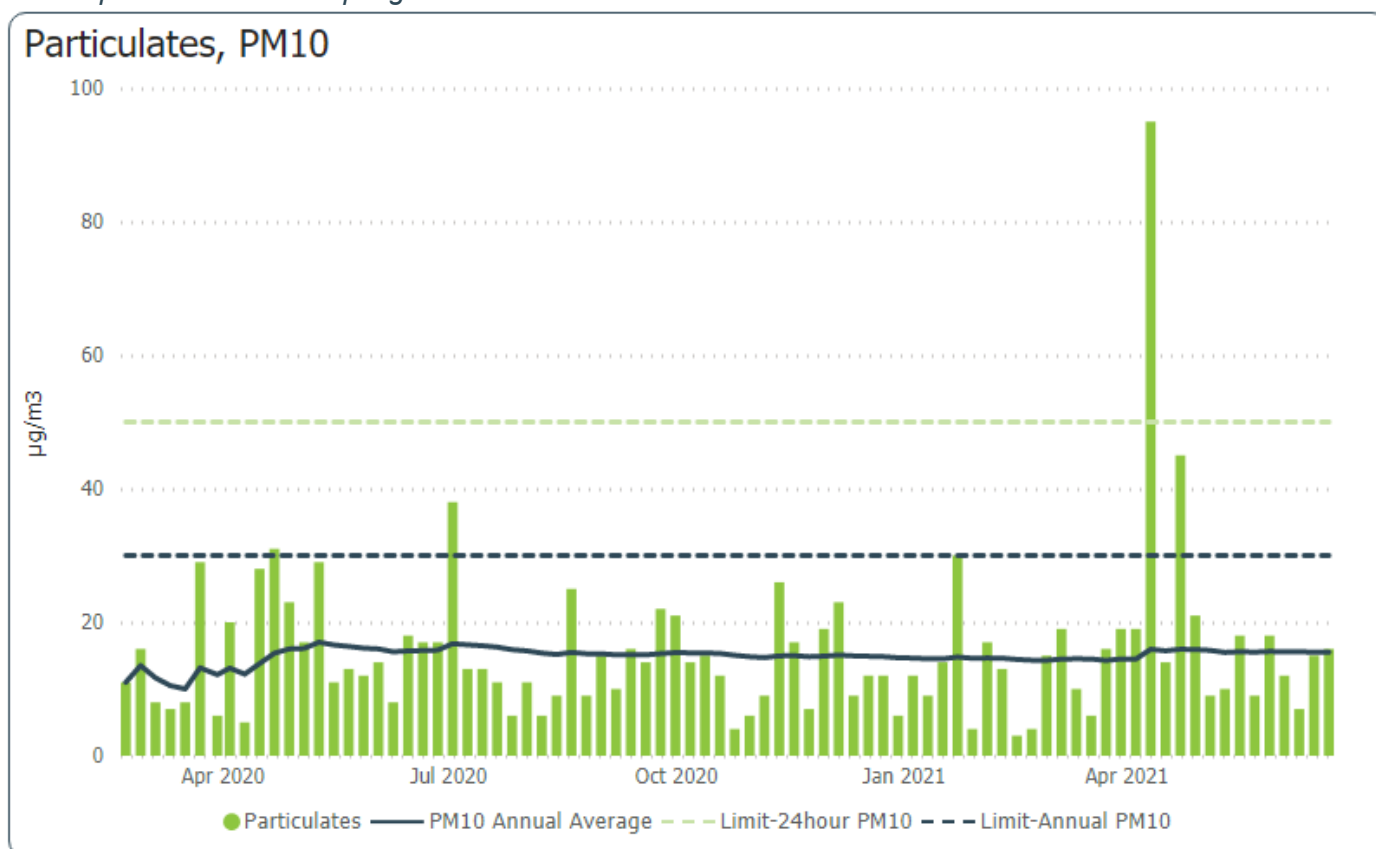
Table 10. Long Term Criteria for Deposited Dust

Pollutant	Averaging Period	Max Increase	Max Total
Deposited Dust	Annual	2 g/m ² /month	4 g/m ² /month

7.2.1.2 High Volume Air Sampling

One high volume air sampler (HVAS) has also been purchased for the site to monitor dust particulates and the results to date are shown below.

Graph 4. HVAS Sampling Results



Only PM10 measurements have been undertaken to date.

TSP and PM10 criteria are reproduced from the Mod 1 consent below.

Table 11. HVAS Long Term Criteria

Table 3: Long-Term Criteria for Particulate Matter		
Pollutant	Averaging period	^d Criterion
Total suspended particulates (TSP)	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 12. Short-Term Criteria for Particulate Matter

Table 4: Short-Term Criteria for Particulate Matter		
Pollutant	Averaging period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Notes to Tables 3-6:

- ^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).
- ^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).
- ^c 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, illegal activities or any other activity agreed by the Secretary in consultation with EPA.

7.2.1.3 Stack Emissions

Emissions testing of the kiln stack was conducted during the reporting period on the 30th March 2021 by Ektimo and the report is found in *Appendix K* and the results are reproduced below.

Table 13. Stack Emissions Results and EPL 1808 Limits

EPA No.	Location Description	Pollutant	Units	Licence Limit	Detected Values 30/03/2021	Mass Rate (g/min)
2	Kiln Exhaust Stack	Total Solid Particles	mg/m ³	100	5.9	4.5
		Nitrogen Oxides (as NO ₂)	mg/m ³	2000	39	29
		Total Fluoride (as HF)	mg/m ³	50	8.6	6.6

Please note that the measurement uncertainty associated with the test results was not considered when determining whether the results were compliant or non-compliant.

Graph 5. Stack Monitoring for EPL 1808

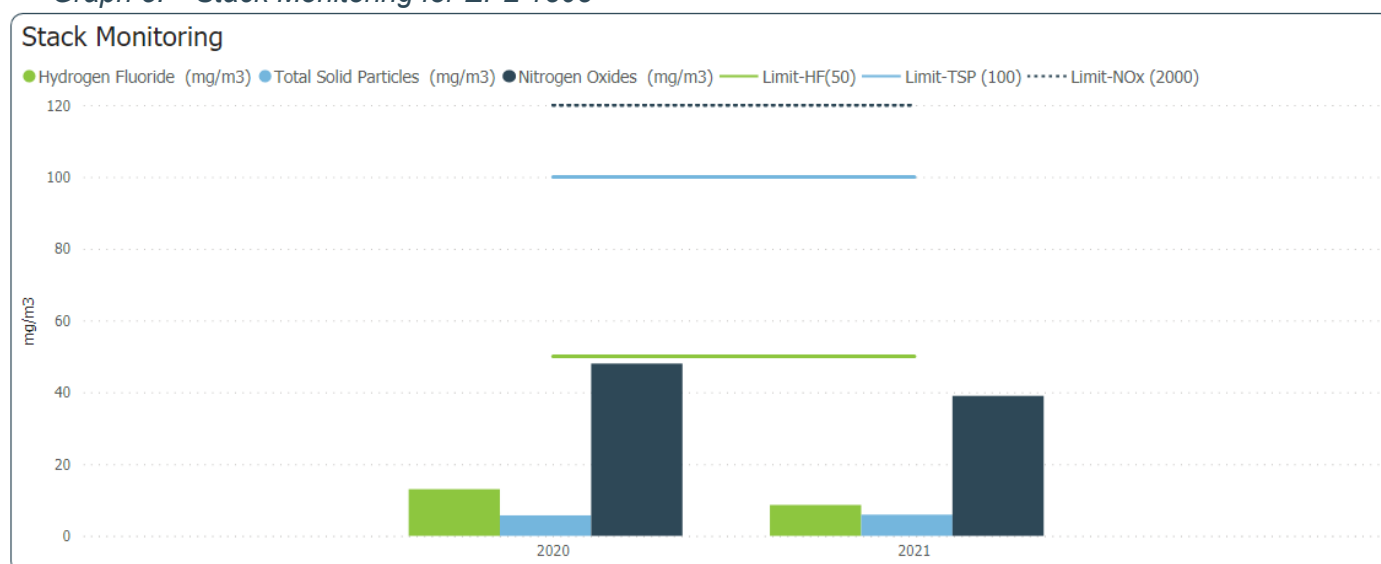


Table 14. Assessable Load for Stack Emissions From 1/6/2020 to 31/5/2021

Assessable Pollutant	Load (kg)*	Load Limit from EPL 1808 (kg)
Coarse Particulates	788	8,400
Fine Particulates	1,577	33,300
Fluoride	3,469	11,700
Nitrous Oxides	12,361	90,300
Sulphur Oxides	40,471	186,500

*Sourced from the EPL website.

Stack emissions criteria from the Mod 1 consent are reproduced below as well as the EPL criteria.

Table 15. Mod 1 Consent Stack Emissions Criteria for Residences

Table 6: Long and Short-Term Stack Emissions		
Pollutant	Averaging period	^d Criterion
Sulphur Dioxide	10-minute	712 µg/m ³
	1-Hour	570 µg/m ³
	24-Hour	228 µg/m ³
	Annual	60 µg/m ³
Nitrogen Dioxide	1-Hour	246 µg/m ³
	Annual	62 µg/m ³
Hydrogen Chloride	1 hour	0.14 mg/m ³

Although ambient air quality monitoring has not been undertaken or modelled for the residences on privately owned land, the stack monitoring results below were the inputs used for the air modelling (AUSPLUME) in the EIS (see Table 16).

Table 16. Comparison of Pollutant Concentrations from the EIS AUSPLUME Modelling

Pollutant	Concentration input into AUSPLUME for EIS (g/sec)	Stack Monitoring Results from April 2020 (g/sec)
Sulphur Dioxide	1.898	0.683
Nitrogen Dioxide	1.254	0.483
Hydrogen Chloride	0.586	0.500
Hydrogen Fluoride	0.198	0.011

The modelled air quality in the EIS was found to be generally below the criteria in Table 15. It is therefore unlikely that the residences experienced levels above the criteria during the reporting period.

7.2.2 Non-Compliances

7.2.2.1 Depositional Dust Non- Compliances

The depositional dust monitoring results for the reporting period are below the annual average criteria. Results for D2 (Gate) increased from 2.2 g/m²/month to 5.7 g/m²/month between November 2020 and December 2021 and from 1.1 g/m²/month in February 2021 to 9.7 g/m²/month in March 2021, all of which exceeded the 2.0 g/m²/monthly increase limit from the consent conditions. There was no mining during the reporting period. D2 sampling noted the presence of bird dropping and algae which may have contributed to the higher results.

As the increase in dust levels were not due to the development on its own, the dust results are compliant.

7.2.2.2 HVAS Non- Compliances

There was one non-compliances with the PM₁₀ monitoring which occurred on Sunday the 11th of April 2021 where the HVAS recorded a 24 hour average PM₁₀ of 95µg/m³. High wind speed from the WSW were experienced on this day with gusts up to 52km/hr and averaging 26km/hr at 9am and 3pm (from BOM Badgerys Creek Data). There were no operations undertaken on the site to contribute to the exceedance.

The annual average for the period was not exceeded.

7.2.2.3 Stack Emission Non-Compliances

The stack monitoring was within the load base requirements and concentration levels for the EPL reporting year. Comparison to the AUSPLUME modelling input data indicates it is unlikely that the ambient stack emission criteria for residences was exceeded.

7.2.3 Comparison to Predictions

As the mining has not commenced in the extension area comparisons to the predictions in the EIS and SoEE are not able to be made. The results however are consistent with the background pollutant concentrations predicted in the Hyder Consulting EIS.

Table 17. Hyder Consulting EIS Background Air Quality Data Comparison

Air Pollutant	Averaging Period	Background Concentration (µg/m ³)	Actual Annual Average at End of Reporting Period
PM₁₀	Annual	16.0	15.5
	24-hour (maximum)	83.8	95.0
NO₂	Annual	9.7	Not applicable
	Monthly (maximum)	41	Not applicable
SO₂	Annual	3.5	Not applicable
	Monthly (maximum)	4.5	Not applicable
TSP	Annual	40.0 (estimate value)	Not applicable 39 (estimate based on the PM ₁₀ being 40% of the TSP annual average of 15.51µg/m ³)
Dust Deposition	Annual	1.8 g/m ² /month	D2- 2.4 g/m ² /month D3- 0.8 g/m ² /month D4- 1.0 g/m ² /month

Note: Ambient monitoring of NO₂ and SO₂ at nearby residences is not undertaken (see Section 7.2.1.3).

7.2.4 Trends and Discrepancies Against Predicted and Actual Impacts

Depositional dust results showed a typical increasing seasonal trend during the summer 2020-2021 but all annual averages are well below the required criteria. The trend for D2 has been impacted by two incidences of high insoluble solids due to the presence of bird droppings and algae in the sample gauges. Dust levels returned to low levels outside of those incidences.

HVAS results are variable and no consistent trend was noted.

Stack emissions are also consistent with previous years for EPL recorded results and no significant trends were observed.

7.2.5 Measures to Improve Performance in the Next Reporting Period

There are several sources of airborne dust on the Bringelly Clay Mine site and surrounds. The principal source is earth-moving activities, including ore extraction and stockpiling. Dozers, excavators and haul trucks will produce airborne dust while undertaking clearing, mining and stockpiling activities and by travelling along unsealed internal roads. The use of a water cart during all of these activities will minimise impact on the environment. Pit and stockpile rehabilitation with vegetation established as soon as practicable will assist with prevention of dust generation. Other air pollutants include gases from the kiln and dryers, since the kiln is not being refurbished there is minimal opportunity to reduce these emissions from current levels.

7.3 WATER/SEDIMENT/EROSION

7.3.1 Surface Water

7.3.1.1 Monitoring Data

No controlled discharge was undertaken during the reporting period and therefore no water quality monitoring is required nor discharge volume data. There was however, overflow events from Dam 5 occurred from the 21st of March 2021 to 26th of March 2021 due to excessive rainfall of approximately 330mm from the 18th March to 25th March 2021.

The EPA limits for discharged water are outlined below.

Table 18. EPA Discharge Concentration Limits

POINT 1

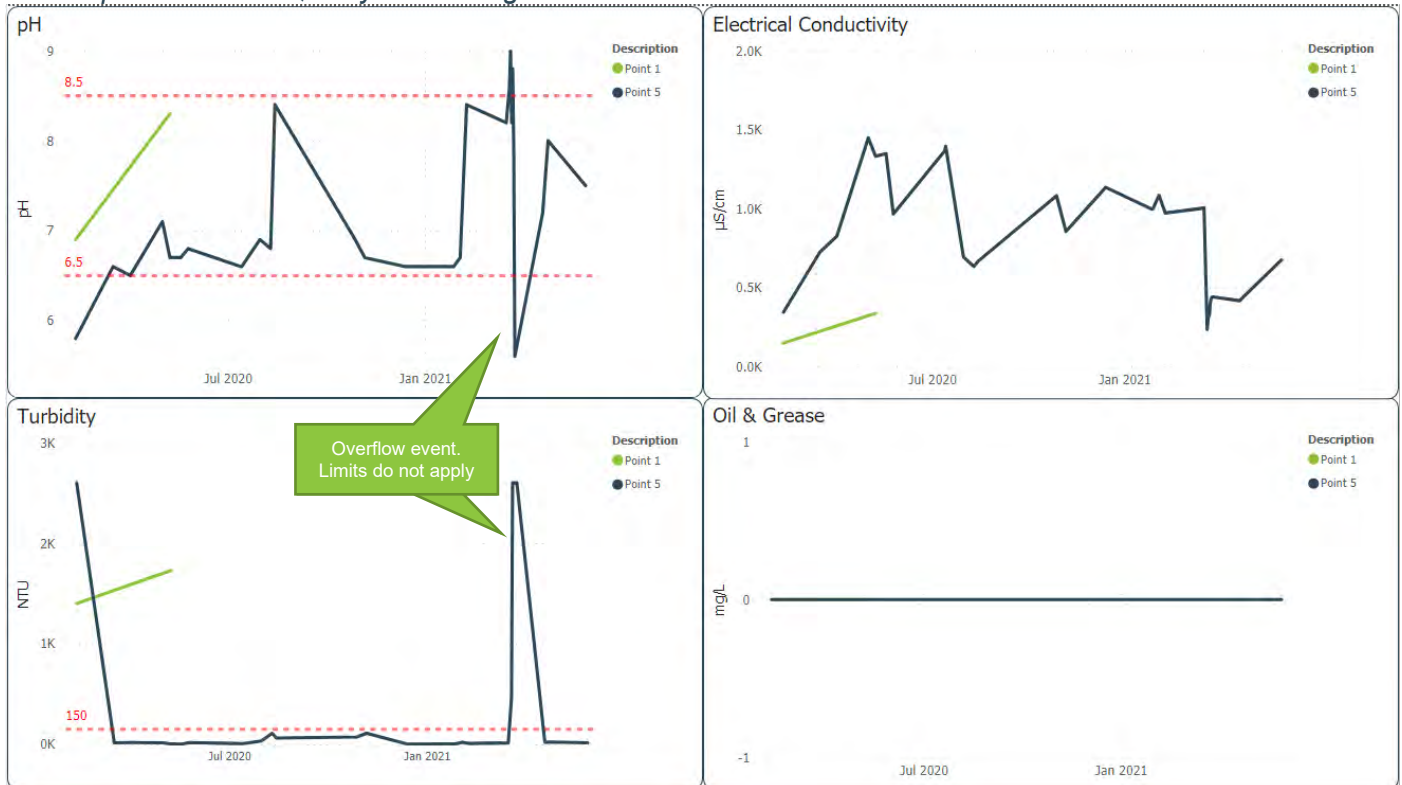
Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Oil and Grease	milligrams per litre				10
pH	pH				6.5-8.5
Turbidity	nephelometric turbidity units				150

POINT 5

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Conductivity	microsiemens per centimetre				1450
Oil and Grease	milligrams per litre				10
pH	pH				6.5-8.5
Turbidity	nephelometric turbidity units				150

Water quality testing has been undertaken of the water held in the dams during the reporting period as shown below.

Graph 6. Water Quality Monitoring



7.3.1.2 Non-Compliances

The overflow events were during an extreme rainfall event where 330mm of rainfall was received over 6 days, beyond the design storm event for the on-site sediment dams. The EPL includes conditions that state that the concentration limits do not apply if rainfall exceeding 50mm over 5 days received (Condition L3.6 and L3.7 in Appendix E). Therefore the overflows are not non-compliances.

7.3.1.3 Comparison to Predictions

The EIS states that the adoption of the water management measures described in the EIS and SoEE would ensure that the project meets the required EPL conditions.

Water held within Dam 5 is generally within the EPL criteria with the exception of the overflow events where the quality of the receiving water is likely to be of poorer quality. The water held in Dam 1 was observed to be elevated in turbidity but was not discharged from the site therefore treatment of the dam to reduce the sediment load was not required.

7.3.1.4 Trends and Discrepancies Against Predicted and Actual Impacts

The pH and Conductivity of the dams is variable and no significant trends have been noted. Turbidity is also variable and but for a few exceptions, below the EPL criteria. Oil and Grease has not been detected in Dam 5.

As no water was discharged from the site there is negligible impact to the downstream environment. During the overflow events due to excessive rainfall, the impacts to the downstream environment would be negligible as the receiving environment would also be expected to be of poor quality.

7.3.1.5 Measures to Improve Performance in the Next Reporting Period

The site will continue to monitor surface water as required. The Water Management Plan (WMP- Version 3) will be reviewed and updated as required. As more data becomes available, future trends will be identified and compared to predictions.

7.3.2 Erosion and Sediment

7.3.2.1 Monitoring Data

Generally, the site is prone to moderate erosion, but this is limited to the exposed worked areas of the quarry. Erosion over the disturbed area is mitigated as much as possible through the establishment of vegetation, which binds the soil and traps silt. Rainfall that occurs over the active mine site does cause some minor erosion on unfinished surfaces, but the sediments are collected on the floor of the mine within the sediment dams. Eroded soils and sediment captured within the pit sump become a part of the surface water management process.

Slopes are kept moderate where possible in the pit to reduce erosion hazard and benches are present on the site.

No mining and no further revegetation has been undertaken during the reporting period.

The capacity of the dams has been monitored during the reporting period. The installation of Dam 7 (as described in the approved WMP- Version 3) has not been undertaken during the reporting period but will be undertaken prior to commencement of extraction in the extension area.

Completion of the Monthly Stormwater Management System Inspection Checklist will commence prior to works in extension area.

An inspection by the Resources Regulator was undertaken on the 15th of April and observations and recommendations were discussed in correspondence dated 7th May 2021 (see *Appendix N*). During the inspection it was noted that;

'....two (2) significant tunnel erosion areas were observed on the western side of the pit shell. These areas appear to be the location of concentrated water flow from off-site inflows as well as on-site sources. Whilst it was observed that sediment was being captured in-pit, these erosion areas have the potential to 'cut-back' and de-stabilise the upper pit shell and affect the soil resource in advance of the current mining area.

It is recommended that PGH conduct a review of the surface water management in this area and determine the cause of this ongoing problem. A suitable remedial action plan should be developed in consultation with neighbouring properties to ensure excessive water ponding and/or rapid water movement in this area is reduced, controlled or eliminated.'

Investigations will be undertaken in the next reporting period to rectify the above issues.

7.3.2.2 Non-Compliances

There were no non-compliances relating to the erosion and sediment management.

7.3.2.3 Comparison to Predictions

The site erosion and sediment control appears to be performing adequately, although as mining in the extension area has not commenced, comparison to some of the predictions is limited.

7.3.2.4 Trends and Discrepancies Against Predicted and Actual Impacts

As this is the first reporting period, no trends or discrepancies can be identified.

7.3.2.5 Measures to Improve Performance in the Next Reporting Period

The site will monitor sediment and erosion monthly. The Water Management Plan (WMP- Version 3) will be reviewed and updated as required. As more data becomes available, trends will be identified and compared to predictions.

7.4 GROUNDWATER

7.4.1 Monitoring Data

Fuel and oil from the plant, machinery and haul trucks present the main risk to potential groundwater contamination. Refuelling and minor maintenance are therefore undertaken within the bunded workshop shed and all fuel storage is adequately bunded. Only small volumes of fuel and oil are held on site and all contractors are required to carry spill kits.

Four groundwater monitoring bores were installed on the site as shown in *Figure Two* in April to May 2013. The bores are all registered under Licence 10BL605770 with the NSW Office of Water.

The bores are to be monitored monthly for depth, pH, Conductivity, Temperature, Total Dissolved Solids, Dissolved Oxygen and Redox Potential. Quarterly monitoring will also include Ammonium, major cations and anions, TRH, BTEX, PAH's, Phenols, nutrients and dissolved metals as specified in the Ground Water Management Plan.

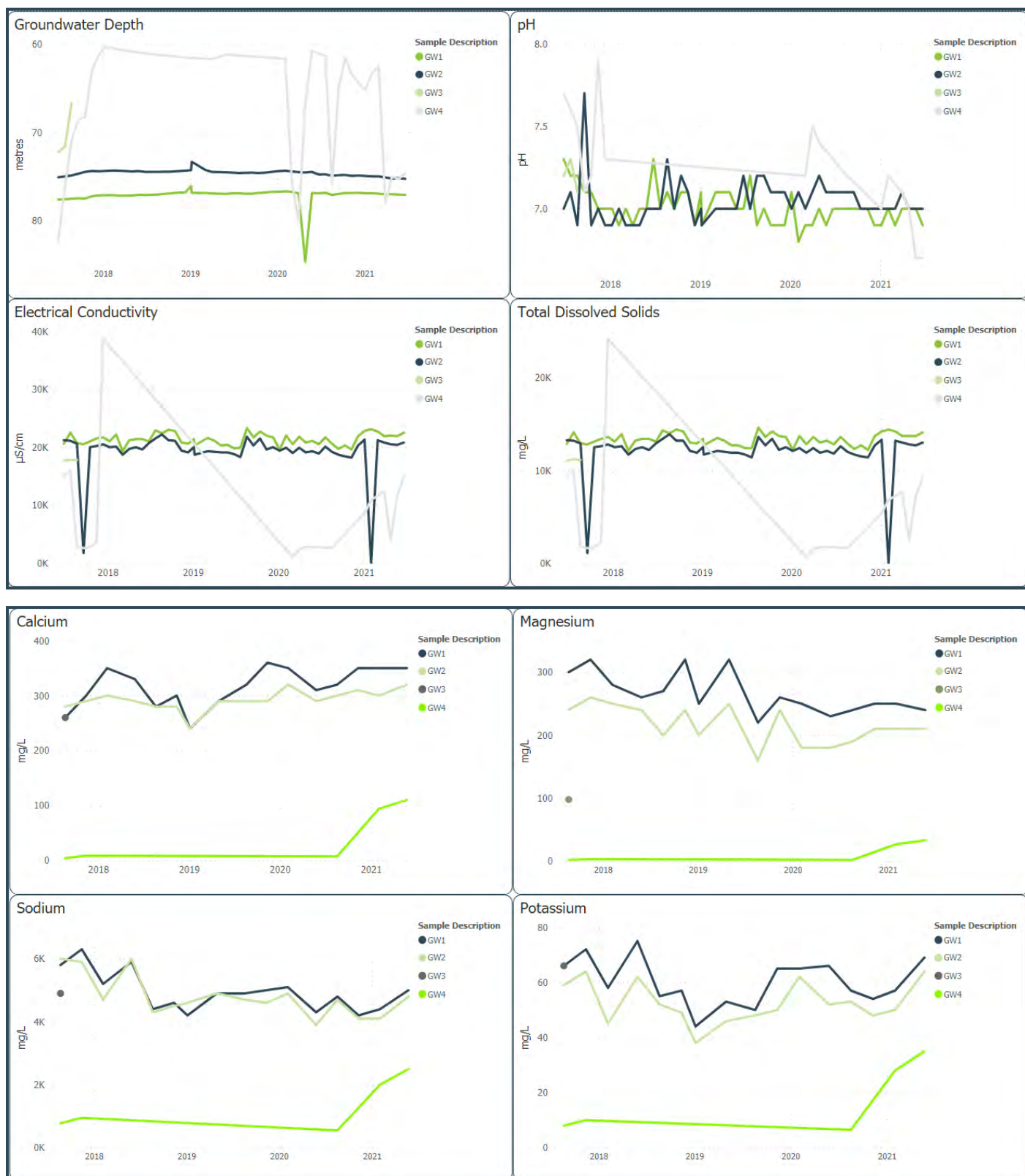
Groundwater sampling commenced mid-2017. Note, GW3 groundwater monitoring bore, located in the stockpile area, was damaged some years ago and cannot be sampled at this stage.

In summary:

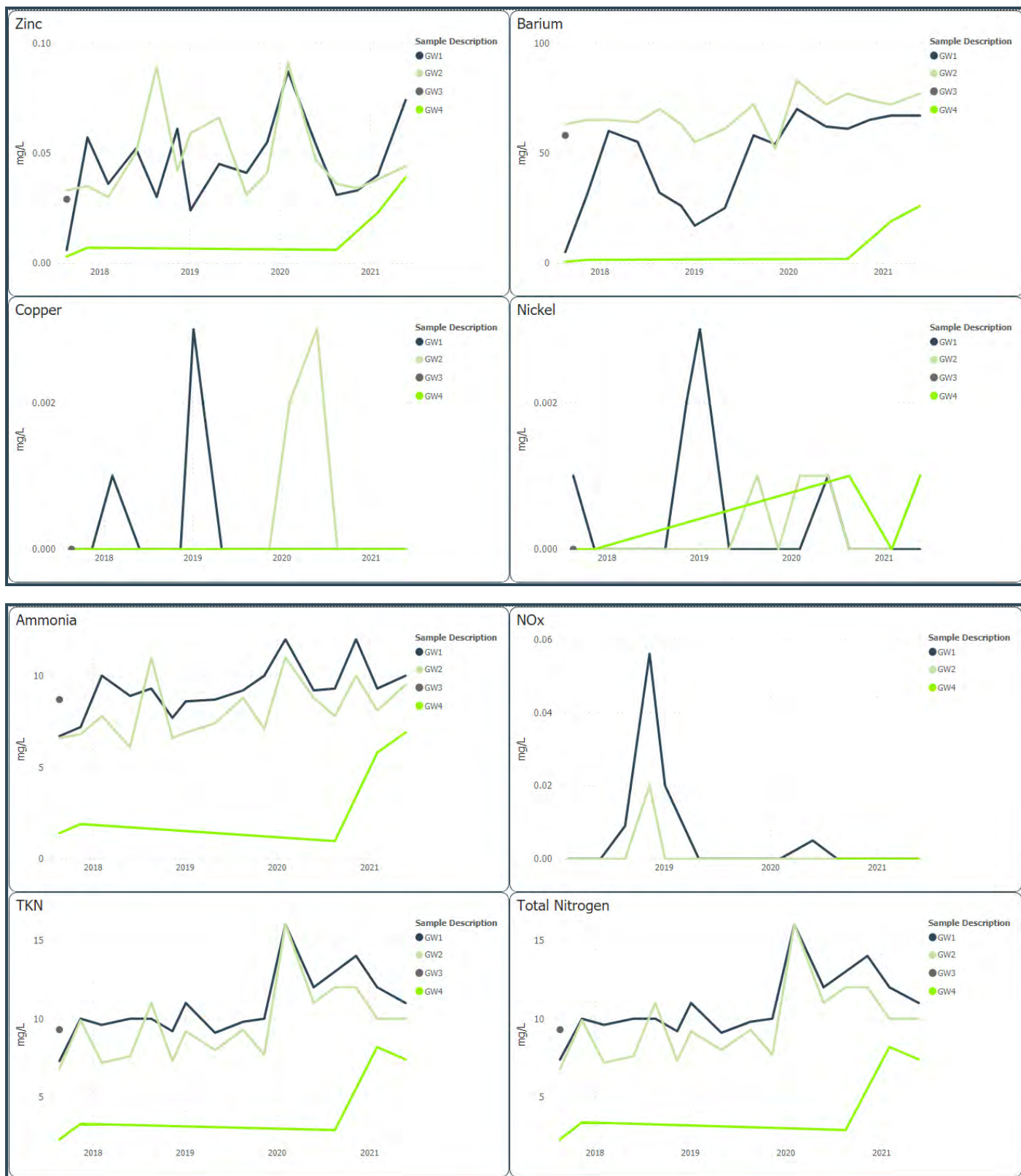
- All sampled water levels are fairly stable, however, GW4 is stable frequently at a low standing water level, with insufficient water volume available to pump and sample.
- The pH's of GW1, GW2 are fairly neutral, remaining between the 6.5 to 7.5 range;
- The conductivity and chloride of GW1 is consistently higher than GW2 but both respond similarly over time;
- GW4 appears to be decreasing in pH since 2018 and increasing in Conductivity since February 2021;
- Anions and Cations for GW1 and GW2 are fairly consistent and similar to each other;
- GW4 cations have increased since February 2021 and anions all decreased with the exception of Chloride;
- Iron and Manganese appear to be on a slightly increasing trend for GW2 and GW4 bores with a marked increase in GW4 from February 2021;
- Zinc, Copper and Nickel for GW1 and GW2 are fairly consistent and Barium shows a slight increasing trend;
- GW4 shows an increase in Zinc, Barium from February 2021;
- Hydrocarbons have not been detected for the last few years with the exception of GW4 in August 2020;
- Nutrients within GW1 and GW2 are similar to each other and GW again shows a general increase from February 2021;

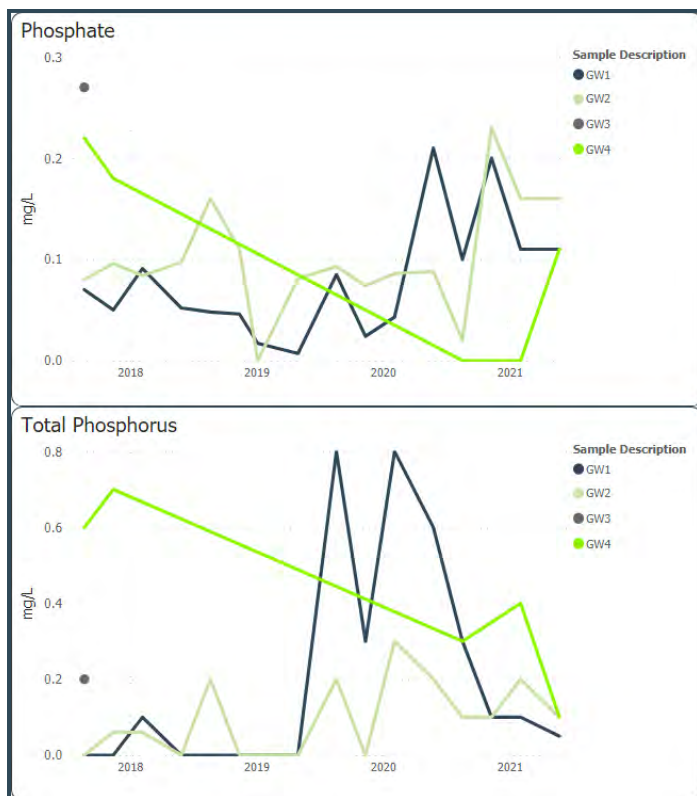
Results are presented in the graphs below. Note, only metals where positive results have been detected are shown.

Table 19. Groundwater Results









7.4.2 Non-Compliances

There were no non-compliances relating to the groundwater management.

7.4.3 Comparison to Predictions

The Groundwater Management Plan (GMP) predicted a negligible change in the groundwater regional flow as a result of the proposed activities. As the extension of the mine has not commenced, the testing of the prediction cannot be made.

Some land clearing activities were undertaken in January 2021, including vehicle plant and equipment traffic, in the vicinity of GW4 to permit access for exploration drilling. It is likely that the changes to the results in GW4 in the February 2021 sampling and onwards are due to the exploration activities.

There were no activities noted that may have contributed to the presence of hydrocarbons in August 2020 in GW4, which have not been detected in the bore since that date.

7.4.4 Trends and Discrepancies Against Predicted and Actual Impacts

To date the groundwater quality and depth levels have remained fairly consistent. As the extension of the mine has not commenced no impacts are attributable to the quarrying in the extension area.

7.4.5 Measures to Improve Performance in the Next Reporting Period

The site will continue to monitor the bores. The Groundwater Management Plan will be reviewed and updated as required. As more data becomes available, trends will be identified and compared to predictions.

7.5 WATER BALANCE

7.5.1 Monitoring Data

Monitoring for the usage of water on-site has not occurred to date as there has been no mining (including the extension area) and no controlled discharges from the site in the reporting period. Recording of discharge volumes will be undertaken during the next reporting period if discharge occurs. Rainfall data has been collected from the on-site meteorological station and is summarised in Section 7.1.

7.5.2 Non-Compliances

There were no non-compliances relating to the water balance.

7.5.3 Comparison to Predictions

The installation of Dam 7, to divert clean water from the Main Pit, has not occurred and comparison to the predictions in the model is therefore not possible at this stage.

7.5.4 Trends and Discrepancies Against Predicted and Actual Impacts

As no recording of water usage or discharge was undertaken and the installation of Dam 7 has not occurred during this first reporting period, no trends or discrepancies can be identified.

7.5.5 Measures to Improve Performance in the Next Reporting Period

The site will monitor water usage and discharge volumes in the next reporting period. The Water Management Plan will be reviewed and updated as required. As more data becomes available, trends will be identified and compared to predictions.

7.6 NOISE

7.6.1 Monitoring Data

Consent conditions list the noise limits as follows.

Table 20. SSD Noise Criteria

Noise Criteria				
2. The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.				
Table 2: Noise criteria dB(A)				
Activity	Receiver	Day/Evening/Shoulder	Night	
		L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (max)
Brick making and quarrying	R1, R2	47	Not Applicable	
	R3, R4, R14	48		
	R15, R17	45		
	All other receivers	44		
Brick making	All receivers	44	43	53
Notes:				
• To locate the receivers referred to in Table 2 refer to Appendix 3.				
• After the first review on any EPL granted for this development under Section 78 of the POEO Act, nothing in this consent prevents the EPA from imposing stricter noise limits on the quarrying operations on site under the EPL.				
Appendix 5 sets out the metrological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.				

Noise monitoring was undertaken during the reporting period in December 2020, March 2021 and June 2021. Noise monitoring results indicated that the site attributable contributions were estimated to satisfy the relevant noise criteria at all locations during the assessments (see *Appendix O*).

7.6.2 Non-Compliances

There were no non-compliances recorded during the reporting period. No noise complaints have been received during the reporting period.

7.6.3 Comparison to Predictions

The noise assessment in the EIS considered two operational scenarios:

- 24-hour processing and brick making activities; and
- Daytime quarrying campaigns, with processing and brick making also being carried out.

7.6.3.1 Processing and Brick Making Activities

For about 6 months each year, processing and brick making activities were predicted to be the only operational noise source on site. The assessment indicates that there would be no exceedances of the Project Specific Noise Levels (PSNL) at any receiver under this operational scenario.

The EIS also includes an assessment of the potential for sleep disturbance associated with the night-time processing and brick making activities. The assessment found that the project would not exceed the applicable sleep disturbance criteria at any locations.

7.6.3.2 Quarrying Campaigns

The EIS assessment indicates that the development would potentially generate noise above the PSNLs at 7 residences.

- Three are predicted to experience noise levels up to 3 dB(A) above the daytime PSNL, including R1 (during all stages of extraction), R2 (during stage 3 extraction only) and R4 (during stage 4 extraction only); and
- Four are expected to experience noise levels 1 to 2 dB(A) above the daytime PSNL.

Under the *Voluntary Land Acquisition and Mitigation Policy*, an exceedance of up to 2 dB(A) is considered to have negligible impacts and would not be discernible by the average listener.

With regard to the receivers predicted to experience noise up to 3 dB(A) above the PSNLs, DPIE notes that the predictions are based on the change in noise levels relative to very conservative background noise levels. If the PSNLs were based on the background noise at each modelled receiver, all exceedances would likely be negligible (i.e. between 1 to 2 dB(A)) or within the daytime PSNL.

Thus DPIE notes that:

- the potential impacts would be intermittent over the duration of the project because quarrying would occur on a campaign basis (3 x 44-day campaigns a year);
- quarrying would not occur during the night, which is the period where noise impacts are generally more noticeable; and
- the predicted exceedances during the morning and evening occur as a result of the noise assessment having lowered the PSNLs to daytime levels.

When this is taken into consideration with the social and economic benefits of the project, DPIE was satisfied the potential noise impacts would be acceptable, subject to the implementation of conditions to minimise the noise impacts of the project.

No comparison to the predictions can be made as mining in the extension area has not commenced.

7.6.3.3 Traffic Noise

The EIS includes an assessment of the potential traffic noise impacts along Greendale Road. As The Northern Road is a main arterial road, the Department accepts that project related traffic noise would not be discernible against the large volume of traffic that uses this road.

Under the *Road Noise Policy*, where existing traffic noise exceeds the applicable criteria, project related traffic noise must remain less than 2 dB(A) above the existing noise levels. The assessment indicates that the project would meet this requirement as it would only result in a 1dB(A) increase at the most affected receivers.

Noise monitoring results indicates the site is in compliance with the consented noise criteria and no complaints were received.

7.6.3.4 Construction Noise

During construction of the new site access road and the noise bund adjacent to Greendale Road, the EIS assessment predicts exceedances of the applicable ICNG criteria of 49 dB(A) (i.e. 10 dB above the background noise level) at receivers 3 and 4, which would exceed the criteria by 2 and 17 dB(A), respectively. No other exceedances are predicted to occur.

No construction has been undertaken during the reporting period therefore comparisons to the predictions in the EIS are not possible.

7.6.4 Trends and Discrepancies Against Predicted and Actual Impacts

No trends or discrepancies have been identified to date, noting that the quarry extension and road/bund construction has not commenced.

7.6.5 Measures to Improve Performance in the Next Reporting Period

The site will continue to monitor noise in the next reporting period. The Noise Management Plan will be reviewed and updated as required. As more data becomes available, trends will be identified and compared to predictions.

7.7 BIODIVERSITY

7.7.1.1 Monitoring Data

No monitoring or maintenance of the Biodiversity Offset Area has been undertaken as the requirement under the conditions of consent (Schedule 3 Condition 21) have not been triggered i.e. no works have commenced in the extension area. The Biodiversity Management Plan (BMP) has been submitted to DPIE for approval but was recently withdrawn and is currently being reviewed.

7.7.1.2 Non-Compliances

As the Biodiversity Management Plan has not been approved or triggered by the commencement of works in the extension area, there were no non-compliances recorded during the reporting period.

7.7.1.3 Comparison to Predictions

No comparison to the predictions can be made until the BMP is approved and commences.

7.7.1.4 Trends and Discrepancies Against Predicted and Actual Impacts

No trends or discrepancies can be identified until the BMP is approved and commences.

7.7.1.5 Measures to Improve Performance in the Next Reporting Period

With the approval by DPIE of the BMP, the management measures may be implemented.

7.8 HERITAGE

7.8.1.1 Monitoring Data

No monitoring for heritage items has been undertaken as the requirement under the conditions of consent (Schedule 3 Condition 27) have not been triggered i.e. no works have commenced in the extension area. The Heritage Management Plan (HMP) has been submitted to DPIE and approved on the 12th December 2019.

7.8.1.2 Non-Compliances

As the Heritage Management Plan has not been triggered by the commencement of works in the extension area, there were no non-compliances recorded during the reporting period.

7.8.1.3 Comparison to Predictions

No comparison to the predictions can be made until the Heritage Management Plan commences.

7.8.1.4 Trends and Discrepancies Against Predicted and Actual Impacts

No trends or discrepancies can be identified until the Heritage Management Plan commences.

7.8.1.5 Measures to Improve Performance in the Next Reporting Period

The site will activate the Heritage Management Plan in the next reporting period. The Plan will be reviewed and updated as required. As more data becomes available, trends will be identified and compared to predictions.

7.9 VISUAL

7.9.1.1 Monitoring Data

Overall the site has very little impact to the visual amenity of neighbouring properties and road users.

Under the consent conditions the monitoring of a vegetation screen to be established on noise bunds must be undertaken. The noise bunds have not been constructed as works in the extension area has not commenced therefore there is no monitoring of the vegetation screen.

The quarry does not utilise lighting and operates during daylight hours. The factory is lit for security purposes at night but is sufficient distance from residents for the impact to be minimal.

Photoplate 2. View of Site Entrance and Quarry from Greendale Road



Photoplate 3. View of North Western Bundwalls from Greendale Road



Photoplate 4. View of Quarry from Residence to the West



Photoplate 5. View of Site from Residents in the South East



Photoplate 6. View of Site from Residents in the East



7.9.1.2 Non-Compliances

There are no non-compliances with regards to visual impacts and no complaints have been received.

7.9.1.3 Comparison to Predictions

The EIS predicted that the overall visual character of the project would remain largely unchanged. The site would be generally unobtrusive when viewed from surrounding properties and public roads. To date the site is unchanged visually as predicted.

7.9.1.4 Trends and Discrepancies Against Predicted and Actual Impacts

As works in the extension areas have not commenced, trends and discrepancies cannot be assessed.

7.9.1.5 Measures to Improve Performance in the Next Reporting Period

Visual monitoring of the bund wall screening will commence with the construction and vegetation of the bund walls.

7.10 WASTE

7.10.1.1 Monitoring Data

The mine generates minimal waste (overburden) which is reused in rehabilitation. Waste generated by the brickworks is stored in the appropriate containers and removed by licenced waste contractors. PGH reviews its purchasing and waste policies and procedures regularly to improve processes as required.

There have been no EPL non-compliances related to the on-site sewerage treatment and disposal in the last 12 months. No waste has been imported to the site. Spill kits are available on site and by mining contractors and all fuel is stored in bunded areas.

As the development has not commenced, no overburden has been generated in the extension area.

7.10.1.2 Non-Compliances

There are no non-compliances related to waste storage and disposal over the reporting period.

7.10.1.3 Comparison to Predictions

The EIS predicted that the continuation and expansion of the operations on the site would result in the generation of the same types and quantities of wastes generated under existing operations. As the extension areas works have not commenced, comparison of overburden waste is not possible as no overburden was produced. Wastes generated by the brickworks is similar to previous years.

7.10.1.4 Trends and Discrepancies Against Predicted and Actual Impacts

No trends of discrepancies can be identified as the works in the extension area have not commenced.

7.10.1.5 Measures to Improve Performance in the Next Reporting Period

The waste management and minimisation measure will be reviewed in the next reporting period. As more data becomes available, trends will be identified and compared to predictions.

7.11 TRANSPORT

7.11.1.1 Monitoring Data

Transportation limits are stated in the consent conditions as follows.

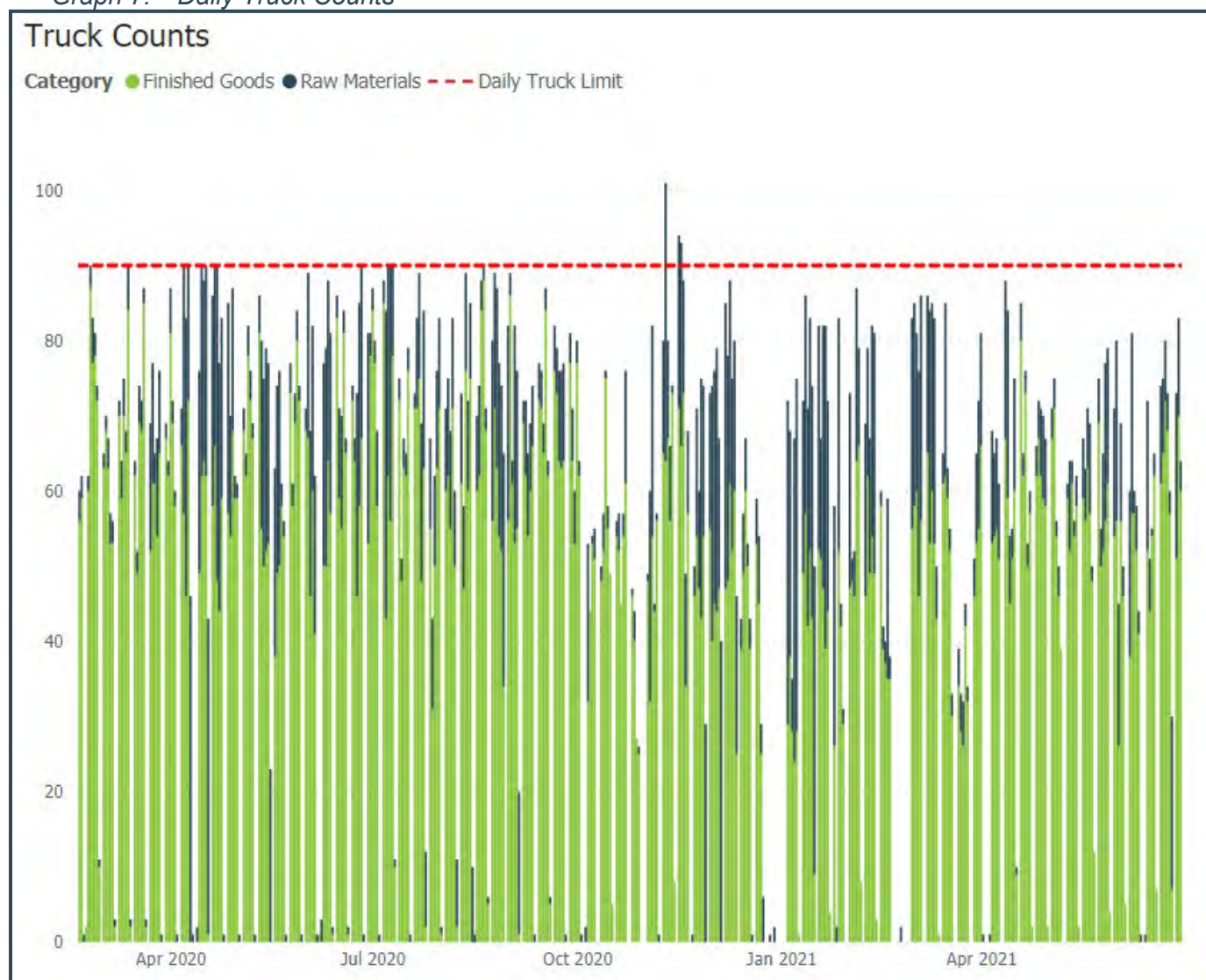
Table 21. Transportation Limits

Transportation Limits	
7.	The Applicant must not:
(a)	transport more than 263,500 tonnes of bricks from the site in a calendar year;
(b)	receive more than 90 trucks to the site per day or more than 18 trucks per hour; and
(c)	dispatch more than 90 trucks from the site per day or more than 18 trucks per hour.

The tonnages of raw material imported to the site and number of bricks exported from the site are recorded. The site produced 147,334 tonnes of bricks over the period from 1st July 2020 to 30th June 2021.

The new weighbridge is operational and the system has been updated to automatically record the data which is graphed below.

Graph 7. Daily Truck Counts



Average daily trucks are 57 per day. Hourly truck counts have been undertaken (pers comm Tony West) and there were no exceedances (hard copies are available on request). The automatic weighbridge system hourly counts have been trialled during the reporting period. It is expected electronic data for hourly truck numbers will be available in the next reporting period.

Table 22. Product Transport Requirements

TRANSPORT	
Monitoring of Product Transport	
11.	The Applicant must keep accurate records of the:
(a)	tonnage of bricks transported from the site (monthly and annually);
(b)	amount of raw material imported to the site (monthly and annually); and
(c)	tonnage of each type of raw materials imported to the site (monthly and annually); and provide the Secretary with a summary of this information upon request.

Approximately 161,230 tonnes of raw material for brickmaking has been imported to the site during the reporting period.

Month	Number of Bricks Produced	Tonnes of Bricks
July	4,564,002	14,377
August	3,948,881	12,439
September	4,066,419	12,809
October	4,340,881	13,674
November	3,940,721	12,413
December	2,864,454	9,023
January	1,792,178	5,645
February	3,687,981	11,617
March	4,257,956	13,413
April	3,895,412	12,271
May	4,703,091	14,815
June	4,710,828	14,839
Annual Total	46,772,804	147,334

Graph 8. Product Transport Monitoring



7.11.1.2 Non-Compliances

The daily truck count was exceeded on the 10/11/2020 with 101 trucks recorded (64 due to finished goods and 37 due to raw materials). The daily count was also exceeded on the 16/11/2020 with 94 trucks recorded (71 due to finished goods and 23 due to raw materials). The next exceedance was recorded on the 17/11/2020 with 93 trucks (66 due to finished goods and 27 due to raw materials). This was due to a large relocation of inventory, exacerbated by truck scheduling and impacted by wet weather in preceding weeks.

DPIE was notified on 27/11/2020 of exceedances and a Warning Letter was issued on the 14th January 2021 (see *Appendix P*).

There were no complaints received.

7.11.1.3 Comparison to Predictions

Tonnages and truck movements are consistent with previous years and within maximum rates predicted in the EIS.

7.11.1.4 Trends and Discrepancies Against Predicted and Actual Impacts

As the works in the extension area have not commenced, trends and comparison to predicted impacts due to the extension cannot be made.

7.11.1.5 Measures to Improve Performance in the Next Reporting Period

The weighbridge system automatic hourly counts will be completed.

7.12 BUSHFIRE

7.12.1.1 Monitoring Data

There is no specific monitoring requirement for bushfires. The site maintains firefighting equipment within the brickworks and mining contractors carry firefighting equipment for small fires. Large fire would necessitate the intervention of the Rural Fire Service. The site maintains a Site Emergency Response Procedure which includes bushfire management measures. Slashing of fire breaks is undertaken as required to remove potential fuel material.

7.12.1.2 Non-Compliances

There are no non-compliances relating to bushfire management.

7.12.1.3 Comparison to Predictions

The proposed expansion to the quarry extraction areas and consequent vegetation clearing was predicted to not enhance any risks to adjoining land, nor make the facilities any more likely to be subject to bushfire hazard. There have been no bushfires within the site during the reporting period, although state-wide bushfires were experienced over the summer period.

7.12.1.4 Trends and Discrepancies Against Predicted and Actual Impacts

The site bushfire management appeared to appropriate and there were no adverse impacts due to bushfire.

7.12.1.5 Measures to Improve Performance in the Next Reporting Period

Maintenance of fire breaks will continue over the next reporting period.

7.13 PUBLIC SAFETY

7.13.1.1 Monitoring Data

In the interest of public safety and reducing the incidence of trespassers, fences and signage have been maintained along the perimeter of the mine site throughout the reporting period. There have been no incidents involving public safety and no incidences of trespassing. All visitors to the site must report to the gate office to sign in.

7.13.1.2 Non-Compliances

There are no non-compliances that relate to public safety.

7.13.1.3 Comparison to Predictions

There are no specific predictions in the EIS that relate to public safety.

7.13.1.4 Trends and Discrepancies Against Predicted and Actual Impacts

As there are no specific predictions in the EIS trends of discrepancies cannot be identified. No trespassing incidents of public safety issues have occurred during the reporting period and it is anticipated that this will continue into the next reporting period.

7.13.1.5 Measures to Improve Performance in the Next Reporting Period

Fences and signage will continue to be maintained and monitored during the next reporting period and repairs completed as required.

8 Rehabilitation

8.1 MONITORING DATA

The approved Rehabilitation Management Plan (RMP) is the 2013 version and the site operates under this RMP. An updated RMP consistent with the Mod 1 consent will be submitted for approval prior to commencing in the extension area. The Mine Operation Plan approved 25th November 2019 also serves as a rehabilitation plan for the Resources Regulator. A Final Land Use Options Plan (FLUOP) is required to be prepared in accordance with Condition 25 of Schedule 3 within 2 years of the date of notifying the Department of the commencement of the development, that is before 24th February 2022.

In summary, the final conceptual landform following the completion of mining will contain a large pit void used as a water storage area. The brickmaking infrastructure outside of the ML will most likely remain. Non-hardstand areas will be rehabilitated.

No rehabilitation trials and research were undertaken during the reporting period. PGH have been undertaking works within the Stages 1 – 4 as shown on *Figure Two* to date, which were approved under the now relinquished 1994 consent. As such, no rehabilitation works outside these stages has occurred.

Once the updated Rehabilitation Plan is approved, rehabilitation trials and works may be commenced.

The following describes the rehabilitation progress during the reporting period as proposed in the MOP.

8.2 DOMAIN SELECTION

The site has been divided into Primary Domains (Operational) and proposed activities for each domain are described in the MOP. No works have been undertaken during the report period.

8.3 SUMMARY OF REHABILITATION AREA DURING THE MOP TERM

It is unlikely that any rehabilitation will be undertaken during the current MOP period therefore Primary Domains are not expected to transition to Secondary Domains. The following tables summarise the progress of each domain by measurements from the most recent aerial found on Nearmap and figures submitted with the MOP.

Table 23. Domain 1 to Domain A Progress

Primary Domain	Secondary Domain	Code (with map legend)	Rehabilitation Phase	Area at start of MOP (ha)	Area to Date	Area at end of MOP (ha)
Infrastructure(1)	Infrastructure(A)	1A	Active	9.37*	9.37	8.77
			Decommissioning	Nil	Nil	Nil
			Landform Establishment	Nil	Nil	Nil
			Growth Medium Establishment	Nil	Nil	Nil
			Ecosystem Establishment	Nil	Nil	Nil
			Ecosystem development	Nil	Nil	Nil
			Relinquished Lands	Nil	Nil	Nil
			Total	9.37	9.37	8.77

* Includes raw material stockpile areas

Table 24. Domain 3 to Domain B Progress

Primary Domain	Secondary Domain	Code (with map legend)	Rehabilitation Phase	Area at start of MOP (ha)	Area to Date	Area at end of MOP (ha)
Water Management Area (3)	Water Management Area (B)	3B	Active	1.97	1.97	1.97
			Decommissioning	Nil	Nil	Nil
			Landform Establishment	Nil	Nil	Nil
			Growth Medium Establishment	Nil	Nil	Nil
			Ecosystem Establishment	Nil	Nil	Nil
			Ecosystem development	Nil	Nil	Nil
			Relinquished Lands	Nil	Nil	Nil
			Total	1.97	1.97	1.97

Table 25. Domain 4 to Domain C and Domain E Progress

Primary Domain	Secondary Domain	Code (with map legend)	Rehabilitation Phase	Area at start of MOP (ha)	Area to Date	Area at end of MOP (ha)
Overburden Emplacement (4)	Rehabilitation - Grassland (C) and Rehabilitation-Woodland (E)	4CE	Active	3.54	3.54	2.35
			Decommissioning	Nil	Nil	Nil
			Landform Establishment	Nil	Nil	Nil
			Growth Medium Establishment	Nil	Nil	0.76*
			Ecosystem Establishment	Nil	Nil	Nil
			Ecosystem development	Nil	Nil	Nil
			Relinquished Lands	Nil	Nil	Nil
			Total	3.54	3.54	3.11

* The noise bunds that will be constructed outside the mine lease boundary prior to the mining in the extension area have been included in this table.

Table 26. Domain 6 to Domain C and Domain E Progress

Primary Domain	Secondary Domain	Code (with map legend)	Rehabilitation Phase	Area at start of MOP (ha)	Area to Date	Area at end of MOP (ha)
Void (Open Cut Void) (6)	Rehabilitation - Grassland (C) and Rehabilitation-Woodland (E)	4CE	Active	11.0	11.0	13.1
			Decommissioning	Nil	Nil	Nil
			Landform Establishment	Nil	Nil	Nil
			Growth Medium Establishment	Nil	Nil	Nil
			Ecosystem Establishment	Nil	Nil	Nil
			Ecosystem development	Nil	Nil	Nil
			Relinquished Lands	Nil	Nil	Nil
			Total	11.0	11.0	13.1

Table 27. Domain 9 to Domain J Progress

Primary Domain	Secondary Domain	Code (with map legend)	Rehabilitation Phase	Area at start of MOP (ha)	Area to Date	Area at end of MOP (ha)
Conservation & Biodiversity Offset Area (9)	Conservation & Biodiversity Offset Area (J)	9J	Active	1.93	1.93	Nil
			Decommissioning	Nil	Nil	Nil
			Landform Establishment	Nil	Nil	Nil
			Growth Medium Establishment	Nil	Nil	Nil
			Ecosystem Establishment	Nil	Nil	1.93
			Ecosystem development	Nil	Nil	Nil
			Relinquished Lands	Nil	Nil	Nil
			Total	1.93	1.93	1.93

8.4 NON-COMPLIANCES

There are no non-compliances that relate to rehabilitation.

8.5 COMPARISON TO PREDICTIONS

Rehabilitation to date has been reviewed in the ARR submitted to the RR annually and approved. Rehabilitation to date has been consistent with the Rehabilitation Objectives.

8.6 TRENDS AND DISCREPANCIES AGAINST PREDICTED AND ACTUAL IMPACTS

No trends or discrepancies can be identified until rehabilitation commences under the Mod 1 consent.

8.7 MEASURES TO IMPROVE PERFORMANCE IN THE NEXT REPORTING PERIOD

An updated RMP will be submitted for approval prior to commencing in the extension area. Monitoring and reporting of rehabilitation progress will continue through the reporting of the Annual Rehabilitation Review to the RR and the AR to DPIE.

8.8 FURTHER DEVELOPMENT OF THE FINAL REHABILITATION PLAN

The post mining land use has not yet been determined due to the predicted long life of the mine and significant changes to surrounding land uses that are likely to occur. A Final Land Use Option Plan (FLUOP) is required to be submitted according to Schedule 3 Condition 25 of the consent. Activities towards the FLUOP will be reported in subsequent Annual Reviews.

9 Completion Criteria

Completion criteria have been identified and approved in the MOP. Completion criteria are based on the conceptual final landform and land use; this could change with any submitted FLUOP as mentioned above. No progress towards the completion criteria as stated in the MOP has been made during this reporting period.

10 Calculation of Security Deposit

A security deposit calculation was calculated in 2015 to accompany the Mine Lease Application (MLA) submission, calculations can be provided upon request. This security was estimated to be \$776,441.88. The estimate was made on the current footprint of the mine, which is yet to expand beyond the previous consent boundaries. Once future works affect the size of the domains used in the previous calculation or a new MOP is submitted, an updated security calculation will be undertaken.

11 Community Consultation

Community consultation meetings were held in April 2020, October 2020 and June 2021 (see Appendix L). The meetings to date have focused on environmental aspects of the approval including run off, dust monitoring, traffic, local road conditions, road safety, driver behaviour, noise, and cumulative impacts from an adjacent concrete batching plant proposed by Boral. The Community was provided, in the April 2020 meeting, a project update and advised that approved management plans are available on the PGH website. This meeting was reported in the previous AR period.

The key issues from the meetings are summarised below.

Table 28. Community Consultative Committee Meeting Issues April 2020

Issue	Details
Dust	<ul style="list-style-type: none"> PGH provided dust monitoring results since the last meeting, noting that there had been spikes in dust during the recent bushfires. They advised that apart from these spikes, dust monitoring showed that the plant was within EPA guidelines.
Weighbridge	<ul style="list-style-type: none"> Community advised that a weighbridge has been installed.
Diesel Filling Area	<ul style="list-style-type: none"> There was an EPA inspection to check on a crack in the concrete near the diesel filling area which could cause oil to leak into the ground. No leak was discovered.
Surface Water	<ul style="list-style-type: none"> There was one notifiable incident being an overflow during a rainfall event. The discharge was caused by a heavy rainfall event over the period 7-10 February, with 312mm of rainfall recorded over the four days at the nearest BOM weather station (Bringelly/Maryland). The event was reported to the EPA immediately. Dam 4 was cleaned out late last year during the extended dry weather and now has substantially increased capacity to manage runoff from major rainfall events. An application will be lodged to vary EPL 1818 to include a stipulation that the concentration limits for water parameters are not applicable to overflow events that occur during a 90th percentile rainfall event. Community advised that when the dams overflow, they typically flow into the nearby creek but that the dams have been maintained well and designed not to overflow. The volume of rain at the time meant that the creek was overwhelmed.
Boundary	<ul style="list-style-type: none"> Community advised of operational boundary of the plant.
Bundwalls	<ul style="list-style-type: none"> Community advised that survey work for the noise bund has been undertaken. Community advised that the construction of the bund walls has not commenced.
Shut Down	<ul style="list-style-type: none"> There may be a shut down over the next few months if there is a downturn in the market.

Table 29. Community Consultative Committee Meeting Issues October 2020

Issue	Details
Approvals Update	<p>Wider Business</p> <p>PGH will be closing the Horsley Park brickworks – which has been producing sandstock bricks. Production will cease in March 2021.</p> <p>The property will be sold due to its high value.</p> <p>The Schofields plant and the Bringelly and Cecil Park plants will continue to operate.</p>
Bringelly Approvals	<p>PGH advised that the company would not be excavating in new cell areas on the site until 2021.</p> <p>The weighbridge is assessing the number of trucks to identify the portion of royalties that needs to be paid to Camden Council by 31 December 2020.</p> <p>Tonnages will be presented to the Department of Planning Industry and Environment (DPIE).</p>
Management Plans	<p>The only two management plans that have not been triggered as yet (until the company excavates new cells) are the biodiversity and rehabilitation management plans.</p> <p>All other plans have been approved and are in place.</p>
Consultation	<p>PGH is introducing a community complaints line and this will be provided on a leaflet to local neighbours as well as on the sign at the entrance to the plant. The leaflet will be letterboxed in the local area soon</p>
Environmental Performance	<p>There have been no environmental notifiable incidents in the period.</p> <p>Dust results presented and all results were below allowable limits.</p> <p>It was noted that the bushfires had impacted dust results.</p> <p>EPA visited the site on August 17, 2020 and did not identify any issues of concern.</p> <p>The company is now focusing on water management. During the period, the company dug out a dam and de-silted it to increase capacity. The EPA were supportive of that approach in their visit.</p>
General Questions	<p>Q. Did PGH water overflow contribute to the floods earlier this year?</p> <p>A. There was three weeks of rain which was an extraordinary rain event and it was not possible to hold all the water on site in that case. EPA did not issue non-conformance given the circumstances. Dams on site are designed to hold water in 1/10yr and 1/100yr events. Any overflow from dams would go across the grassed area and into the creek.</p> <p>Q. Has PGH connected into the mains water that Boral has facilitated next door?</p> <p>A: PGH is already connected to mains water and is looking at recycling options for our dam water and have a goal to reduce potable water use by 20% by 2030.</p> <p>The company is looking across the business at environmental initiatives including a range of options such as pasteurising organic matter and feeding it into brick material, the use of biomass, and improving its sustainability in general through circular economy, partnerships and beneficial re-use .</p> <p>Q: Are you reducing your carbon footprint – as brickmaking uses a lot of energy?</p>

Issue	Details
	<p>A: PGH already re-use brick material which reduces energy use, with a very low brick reject rate of .2%. The company has replaced lighting to reduce energy consumption and note that a south Australian brick plant has implemented solar. Closing Horsley Park has reduced the company's carbon footprint. PGH has introduced sustainability as a strategic pillar which will improve its implementation across the business.</p> <p>PGH is also re-using water on site for dust suppression and looking at re-using it in processing.</p> <p>PGH advised that the new PGH CEO is focusing on sustainability and the business has been restructured.</p>
Bringelly Public School	<p>Ms Scott (Principal) advised on the bushfire process for Bringelly School which included emergency evacuation procedures by bus, and RFS to have a truck and command centre at the school. Bringelly PS has been classed as a Category 2 school in terms of bushfire risk. The Principal has been provided with a bushfire APP to assist in communication in the event of bushfire.</p> <p>Discussion ensued on the drop off point at Bringelly Public School on Greendale Rd being moved around the corner onto the old northern road (now Wentworth Rd) which, since completion of road works, is now a dead end but has no stopping signs along its length. PGH offered to assist through its government relations staff to see if assistance could be provided in achieving this with RMS. The Chair also offered to assist</p>

Table 30. Community Consultative Committee Meeting Issues June 2021

Issue	Details
Project Update	<ul style="list-style-type: none"> • PGH will introduce a community complaints line. • A letterbox drop will be undertaken and the contact number will be promoted on signage by PGH. • Truck records are being logged and kept. • Independent Environmental Audit has been completed. • Production figures have been forwarded to authorities. • The biodiversity and rehabilitation management plans have been submitted to DPIE aligning with timing of triggers. • PGH further investigating using recycled water from dam in brickmaking. • EPA will visit in August 2021 to do inspection.
Independent Audit	<p>During the period an independent environmental audit was conducted.</p> <ul style="list-style-type: none"> • 66 criteria were assessed. • 43 criteria were compliant. • 15 were not applicable to Bringelly brickworks. • 8 non-compliances several of the non-compliant findings were administrative. <p>None of the non-compliance findings resulted in material harm to the community or environment.</p> <p>One was a truck exceedance- too many trucks entering and exiting in one day, noting this was related to a one-off event of a large relocation of inventory, exacerbated by truck scheduling, and impacted by wet weather in preceding weeks.</p>
Environmental Performance	<p>2020/21 results were below maximum deposited dust levels.</p>
Exploration	<p>PGH gave an overview of PGH's application for an exploration licence over the Bringelly brickwork site. The exploration licence was previously owned by Austral.</p> <p>The exploration licence does not allow PGH to mine but will provide protection of the resource which is known as Bringelly Shale in and around our current mining lease.</p>
CSR Network Optimisation	<p>PGH gave an overview about CSR optimisations and advised that there are pressures on factories from urban encroachment. This has happened around the airport where there is additional pressure for airport related businesses.</p> <p>As a result, PGH is expecting to close the Schofields plant in the future releasing land for residential development and is seeking to consolidate manufacturing at the Bringelly site, increasing production at Bringelly by 25%.</p> <p>PGH has also closed Horsley Park.</p> <p>A project scoping report for the consolidated plant would be presented to DPIE within two weeks.</p>

Issue	Details
Truck Movements	<p>Q: How will this affect truck movements?</p> <p>The hourly rate for tucks will increase however the commitment to 18 trucks per hour during school peak times will be retained.</p> <p>It was noted that the phasing of the lights at the intersection near the school is favouring Greendale Rd, which has exacerbated the issues of trucks maintaining high speed near the school has been exacerbated as they don't have to slow down for the lights as often. Noted that it is not just PGH related trucks.</p> <p>Q: Can you reduce truck numbers during peak school pickup and drop off periods?</p> <p>A: We anticipate that we will stay within 18 trucks per hour at peak school pick up and drop off times.</p> <p>Q: Are you strict on bad driver behaviour?</p> <p>A: Yes, we can ban drivers and companies. We have a Code of Conduct, a complaints line and we can conduct investigations into behaviours. We also have some tracking devices on some trucks.</p> <p>Q: What hours do trucks arrive and depart?</p> <p>A: The hours are between 6am and 6pm. Most trucks must leave the site by 8am. The majority are metro deliveries and return to the yard as scheduled throughout the day to pick up bricks, then some drift back later.</p>
Entry Re-Alignment	<p>Q: When will the entry be realigned?</p> <p>A: When changes in volume occur with the amalgamation of plants. We are discussing this with DPIE at present. The change in the location will be closer to the school which will mean that trucks will be slower near the school as they accelerate and decelerate,</p> <p>Discussion ensued regarding the safety issues near the Bringelly Public School.</p> <p>Suggestions included contacting RMS to remove the no stopping signs, installing speed humps, writing to Camden Council to request a meeting, installing speed cameras, new fencing etc,</p> <p>Meeting agreed to write to Camden Council to request a meeting with CCC to discuss the issues and options.</p>

11.1 FOCUS FOR NEXT 12 MONTHS

- PGH will provide an update on the current status of Environmental Management Plans to the CCC;
- PGH will regularly report dust monitoring and other environmental results to the CCC;
- CCC will contact RMS and Council to seek resolutions to safety; and

12 Complaints and Incidents

No complaints were received during the reporting period.

Environmental incidents included a transportation limit that was exceeded due to a large relocation of inventory, exacerbated by truck scheduling and impacted by wet weather in preceding weeks (see *Section 7.11.1.2*). DPIE was notified on 27/11/2020 of exceedances and a Warning Letter was issued on the 14th January 2021 (see *Appendix P*).

The PM₁₀ limit was exceeded on Sunday the 11th of April 2021 where the HVAS recorded a PM10 of 95µg/m³. High wind speed from the WSW were experienced on this day with gusts up to 52km/hr and averaging 26km/hr at 9am and 3pm (from BOM Badgerys Creek Data). There were no operations on site to contribute to the exceedance. The 24-hour limit was thus exceeded however the annual average limit was compliant during the reporting period.

13 Independent Audit

The Independent Environmental Audit is required within one year of commencing the development and was undertaken by Element Environmental on January 2021 and is available on the PGH website (<https://www.pghbricks.com.au/-nsw-environmental-reporting>). There were 6 non-compliances identified at the time of the audit.

13.1 NON-COMPLIANCES

Audit non compliances are reproduced below.

Table 31. Independent Audit Non-Compliances

Audit Table Identifier	Condition	Findings	Progress
4 26	C2 S2 Terms of consent C4A S3 Noise – operating conditions	<p>The proposed noise bund along Greendale Road described in the EIS and required under C4A S2 and the noise management plan has not been constructed.</p> <p>The client believed construction of the bund was associated with construction of the new access road required under C14 S3 and production of bricks under the new limits in C6 S2.</p> <p>However, there is no such trigger under C4A S2 and all brick production is occurring under SSD_5684, regardless of new production limits.</p>	<p>The noise bund has not been constructed.</p> <p>There have been no noise monitoring exceedances recorded and no noise complaints received.</p> <p>Noise monitoring to be continued.</p>
9 64	C7 S2 Limits of consent – transportation limits C7 S5 Environmental management – incident reporting	<p>C7 S2 requires the facility not receive more than 90 trucks to the site per day or more than 18 trucks per hour and dispatch more than 90 trucks from the site per day or more than 18 trucks per hour.</p> <p>Limits were exceeded as follows: 10/11/2020 (11 vehicles), 16/11/2020 (4 vehicles) and 17/11/2020 (3 vehicles). DPIE was notified of these exceedances on 27/11/2020.</p> <p>C7 S5 requires PGH to immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident.</p> <p>DPIE was informed of the vehicle exceedance on 27/11/2020, which was 17 days after the first exceedance on 10/11/2020. A detailed report was provided to DPIE on 10/12/2020.</p>	<p>No actions required.</p> <p>No further exceedances recorded.</p>

Audit Table Identifier	Condition	Findings	Progress
11	C9 S2 Surrender of existing development consent	This condition requires that within 4 months of commencing development under SSD_5684, the Applicant must surrender the development consent (DA 91/1194) for existing operations on the site. Council was notified of the intention to surrender the consent on 28/07/2020, which was over four months since commencement of SSD_5684.	Development has been surrendered. No further actions.
28	C6 S3 Noise – noise management plan	Noise has not been monitored at the required frequency (quarterly) under the noise management plan. Noise was not monitored during quarters 1 or 2.	Noise monitoring at the required intervals has commenced. No further actions.
60	C3 S5 Environmental management – environmental management plans	This condition specifies the requirements for management plans required under the consent. The traffic management plan does not contain contingencies should limits be exceeded and does not contain measures for reporting incidents, non-compliances with the approval. The noise management plan does not contain a contingency plan.	Traffic Management Plan and Noise Management Plan are to be reviewed and submitted to the Secretary for approval.
61	C4 S5 Environmental management – annual review	This condition requires PGH to submit a report reviewing the environmental performance of the facility to DPIE by the end of September each year. The 2020 report was lodged to the major projects website on 30/11/2020. This was past the end of September and the delay was allegedly due to the inaccessibility of the website. Despite the above, the annual review was completed on 21/09/2020.	No actions required. This report will be submitted by the due date.

Recommendations from the Audit are:

- Monitor noise to determine if the absence of the bund is resulting in noise exceedances. If not, apply to DPIE to defer construction;
- Continue implementation and assessment of management measures in Table 3.2;
- Continue quarterly noise monitoring as described at Item 8 in Table 3.3. Noise Management Plan; and
- Update Environmental Management Plans to be compliant with Condition 60;

13.2 OPPORTUNITIES FOR IMPROVEMENT

- It is recommended that PGH remain vigilant regarding litter at the weighbridge and spreading across the front of the site, including regular inspections of the area. The bin will help in this regard.

14 Improvement Measures

Table 32. Improvement Measures

Item	Due
Ensure the automatic weighbridge system can provide tonnages and hourly truck counts	Prior to commencement in the extension area.
Update any strategies, plans or programs as required under consent conditions and submit to DPIE for approval prior to commencement in the extension area.	As required
(a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.	Prior to commencement in the extension area.
Provide annual quarry production data to DRG using the online portal.	By 31st October 2022 for year ending 30th of June
The noise bund adjacent to the northern boundary of the extraction area is to be constructed.	Prior to commencement in the extension area.
Implement periods of respite during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road;	During construction
Maintain the effectiveness of noise suppression equipment on plant and equipment on site;	At all times
Minimise the noise impacts of the development during meteorological conditions under which the noise criteria in this consent do not apply.	During adverse meteorologic conditions
Design and construct the new site access road intersection with Greendale Road in accordance with applicable AUSTROADS standards, to the satisfaction of Camden Council. Notify the Secretary in writing within 30 days of obtaining Council approval. Note: New intersection has prompted re-design by Council and consultation is continuing.	By 24 th February 2021
Ensure the Biodiversity Management Plan is prepared and approved by DPIE and implemented.	Prior to commencement in the extension area.
Make suitable arrangements to provide appropriate long-term security for the offset area, to the satisfaction of DPIE.	By 24 th February 2022
Lodge a conservation bond with DPIE to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.	Within 6 months of the approval of the Biodiversity Management Plan
Prepare a Final Land Use Options Plan for the site to the satisfaction of DPIE.	By 24 th February 2022
Update the all Plans and Reporting under the Mine Lease conditions to be compliant with the July 2021 changes in the Mining Act and Regulation.	Prior to commencement in the extension area.

Item	Due
Establish a vegetation screen on both noise bunds, as soon as practicable after construction of the bunds.	As soon as practicable after construction of the bunds
Continue liaison with Community Consultative Committee	Due Nov 2021
Continue Environmental Monitoring and compare with relevant limits and undertake measures to maintain compliance with criteria.	As required
Continue weed control measures in accordance with the Weed Management Plan and as advised by Camden Council and qualified specialists.	Ongoing

15 References

- Ref 1 New South Wales Department of Trade & Investment – Resources and Energy (September 2013) ESG3: Mining Operations Plan (MOP) Guidelines
- Ref 2 DECC (2004) Managing Urban Stormwater Soils and Construction V1
- Ref 3 DECC (2009) Managing Urban Stormwater Soils and Construction V2E Mines and Quarries
- Ref 4 Hyder (2013) Boral Bringelly Brickworks- Environmental Impact Statement
- Ref 5 VGT (2019) Bringelly MOP Amendment
- Ref 6 VGT (July 2021) Resource Assessment for Bringelly Clay/ Shale Mine

Appendix A

SSD_5684 2015 Consent Conditions Mod 1 2016

Development Consent

Section 89E of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I approve the development application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

David Kitto
Executive Director
Resource Assessments and Business Systems

Sydney

2015

SCHEDULE 1

Application Number:

SSD_5684

Applicant:

Boral Bricks Pty Ltd

Consent Authority:

Minister for Planning

Land:

[Lot 100 in DP 1203966](#)

Development:

Bringelly Brickworks Extension Project

Modification 1 (October 2016 shown in [blue](#) text)

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DEFINITIONS

AHD	Australian Height Datum
Annual Review	The review required by condition 4 of schedule 5
Applicant	Boral Bricks Pty Ltd, or any other person or persons who rely on this consent to carry out the development that is subject to this consent
BCA	Building Code of Australia
Biodiversity offset strategy	The conservation and enhancement strategy described in the EIS, and shown conceptually in Appendix 4
Brick making operations	Includes the receipt, handling, processing, storage and transportation of raw materials on site, brick making on site and transportation of finished bricks on site
CCC	Community Consultative Committee
Conditions of consent	Conditions contained in schedules 1 to 5 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this consent
CPI	Australian Bureau of Statistics Consumer Price Index
Date of commencement	The date notified to the Department by the Applicant under condition 8 of Schedule 2
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment
Development	The development described in the documents of condition 2(a) of Schedule 2
Development area	All land to which the development application applies, as listed under "Land" in schedule 1 and shown in Appendix 1
DPI Water	Department of Primary Industries - Water
DRE	Division of Resources and Energy, within the NSW Department of Industry
EEC	Endangered Ecological Community, as defined under the <i>Threatened Species Conservation Act 1995</i>
EIS	Environmental Impact Statement titled <i>Bringelly Brickworks and Quarry Expansion</i> (2 volumes), dated September 2013, as modified by the Response to Submissions titled, <i>Bringelly Brickworks and Quarry Expansion, Response to Submissions</i> dated February 2014 and the letter entitled <i>Bringelly Brickworks – Biodiversity Offsets</i> , dated 2 June 2014
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6pm to 10pm
Extension area	The area outside of the existing quarry footprint (i.e. cells D, E, F, G, H and I, as shown conceptually in Appendix 2)
Feasible	Feasible relates to engineering considerations and what is practical to build
GDE	Groundwater Dependent Ecosystem
GPS	Global Positioning System
Growth Centres SEPP	<i>State Environmental Planning Policy (Sydney Regional Growth Centres) 2006</i>
Ha	Hectare
Incident	A set of circumstances that: <ul style="list-style-type: none"> causes or threatens to cause material harm to the environment; and/or breaches or exceeds the limits or performance measures/criteria in this consent
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedules 3 and 4 of this consent

	where it is defined to mean the whole of a lot, or contiguous lots, owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
m	Metres
Minister	Minister for Planning, or delegate
Mitigation	Activities associated with reducing the impacts of the development
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NP&W Act	<i>National Parks and Wildlife Act 1974</i>
OEH	NSW Office of Environment and Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or the Applicant (or its subsidiary)
Quarrying operations	Includes the removal of overburden and extraction, handling, storage and transportation of extractive materials on site
Raw materials	Raw materials imported for use in brick making including clay/shale and additives (such as manganese and iron oxides)
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, ensuring that it is safe, stable and non-polluting and appropriately revegetated
RMS	Roads and Maritime Services
Secretary	Secretary of the Department, or nominee
SEE (Mod 1)	Statement of Environmental Effects titled ' <i>Section 96(1A) Modification Supporting Information</i> ' dated August 2016 and prepared by Element Environment, including the Response to Submissions document dated September 2016
Site	The land listed under "Land" in schedule 1
Shoulder	The period between 6am to 7am on Monday to Saturday
South West Growth Centre	An area of land identified under the Growth Centres SEPP

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this consent, the Applicant **must** implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.

TERMS OF CONSENT

2. The Applicant **must**:
 - (a) carry out the development generally in accordance with the EIS **and SEE (Mod 1)**; and
 - (b) the conditions of this consent.

Note: The general layout of the development is shown in Appendix 2.

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
4. The Applicant **must** comply with any reasonable requirement/s of the Secretary arising the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent;
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; or
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

Quarrying and Brick Making Operations

5. The Applicant may carry out quarrying **operations** and brick making operations from the date of commencement of development under this consent until 1 March 2045.

Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.

Production Limits

6. The Applicant **must** not:
 - (a) extract more than 200,000 tonnes of clay/shale from the site in any calendar year;
 - (b) produce more than 263,500 tonnes of bricks at the site in any calendar year;
 - (c) carry out quarrying operations beyond 46 m AHD; and
 - (d) receive more than **321,000** tonnes of raw materials required for brick making to the site in any calendar year.

Transportation Limits

7. The Applicant **must** not:
 - (a) transport more than 263,500 tonnes of bricks from the site in a calendar year;
 - (b) receive more than 90 trucks to the site per day or more than 18 trucks per hour; and
 - (c) dispatch more than 90 trucks from the site per day or more than 18 trucks per hour.

NOTIFICATION OF COMMENCEMENT

8. **Prior to commencing development under this consent, the Applicant must notify the Department in writing of the date on which it will commence development permitted under this consent.**

SURRENDER OF EXISTING DEVELOPMENT CONSENT

9. Within 4 months of commencing development under this consent, the Applicant must surrender the development consent (DA 91/1194) for existing operations on the site in accordance with Section 104A of the EP&A Act.

Following the commencement of development under this consent, the conditions of this consent (including any notes) shall prevail to the extent of any inconsistency with the conditions of the existing development consent (DA 91/1194).

STRUCTURAL ADEQUACY

10. The Applicant must ensure that any new buildings and structures, and any alterations, or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

DEMOLITION

11. The Applicant must ensure that all demolition work on site is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

12. The Applicant must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to any damage to roads caused as a result of general road usage.

OPERATION OF PLANT AND EQUIPMENT

13. The Applicant must ensure that all plant and equipment used on site or any monitoring equipment used off site for monitoring the performance of the development is:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

UPDATING AND STAGING STRATEGIES, PLANS OR PROGRAMS

14. With the approval of the Secretary, the Applicant may submit any strategies, plans or programs required by this consent on a progressive basis.

To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.

15. Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant **must** implement the existing strategies, plans or programs for the site that have been approved under DA 91/1194.

IDENTIFICATION OF APPROVED LIMITS OF EXTRACTION

16. Prior to undertaking quarrying operations in the extension area, the Applicant **must**:
- (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and
 - (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.
17. While quarrying operations are being carried out, the Applicant **must** ensure that these boundaries are clearly marked at all times to allow operating staff and inspecting officers to clearly identify the approved limits of extraction.

PRODUCTION DATA

18. The Applicant **must**:
- (a) provide annual quarry production data to DRE using the standard form for that purpose; and
 - (b) include a copy of this data in the Annual Review (see condition 4 of schedule 5).

DEVELOPER CONTRIBUTIONS

19. The Applicant **must** pay Camden Council road maintenance contributions of \$0.0811 for every tonne of material transported to and from the site, indexed to CPI. Each payment must be:
- (a) paid to Council at the end of each calendar year; and
 - (b) based on weighbridge records of all supplementary brick making materials transported to the site and bricks and spoil transported from the site.

Note: If the parties are not able to agree on any aspect of the maintenance contributions, either party may refer the matter to the Secretary for resolution.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

HOURS OF OPERATION

- The Applicant **must** comply with the operating hours set out in Table 1.

Table 1: Operating Hours

Activity	Operating Hours
<ul style="list-style-type: none"> Quarrying operations Deliveries Dispatch of finished bricks 	6am to 6pm, Monday to Friday 6am to 1pm, Saturday No activities on Sundays or Public Holidays
Brick making operations (except dispatch of finished bricks)	24 hours a day, 7 days a week
Construction activities	7am to 6pm, Monday to Friday 8am to 1pm, Saturday No construction to be undertaken on Sundays or Public Holidays

NOISE

Noise Criteria

- The Applicant **must** ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.

Table 2: Noise criteria dB(A)

Activity	Receiver	Day/Evening/Shoulder	Night	
		<i>L_{Aeq}(15 min)</i>	<i>L_{Aeq}(15 min)</i>	<i>L_{A1}(max)</i>
Brick making and quarrying	R1, R2	47	Not Applicable	
	R3, R4, R14	46		
	R15, R17	45		
	All other receivers	44		
Brick making	All receivers	44	43	53

Notes:

- To locate the receivers referred to in Table 2 refer to Appendix 3.
- After the first review on any EPL granted for this development under Section 78 of the POEO Act, nothing in this consent prevents the EPA from imposing stricter noise limits on the quarrying operations on site under the EPL.

Appendix 5 sets out the metrological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner/s to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

Construction Noise

- The Applicant **must** manage noise generated during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road, in accordance with the guidelines specified in Table 2 of the *Interim Construction Noise Guideline*.

Note: Management guidelines are applicable to receivers 3 and 4, shown in Appendix 3.

Noise Bunds

4. The Applicant must ensure that the noise bund adjacent to the northern boundary of the extraction area is constructed prior to the commencement of quarrying operations in the extension area.
- 4A. The Applicant must ensure that the noise bund adjacent to Greendale Road is constructed prior to the commencement of brick making operations.

Operating Conditions

5. The Applicant **must**:
 - (a) implement all reasonable and feasible mitigation measures to minimise construction, operational and road noise of the development;
 - (b) implement periods of respite during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road;
 - (c) regularly assess noise monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the noise criteria in this consent;
 - (d) maintain the effectiveness of noise suppression equipment on plant and equipment on site;
 - (e) minimise the noise impacts of the development during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 5); and
 - (f) carry out regular noise monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.

Noise Management Plan

6. The Applicant **must** prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (c) describe the reasonable and feasible mitigation measures that would be implemented to ensure:
 - construction noise is minimise;
 - compliance with the relevant noise criteria and operating conditions in this consent;
 - best management practice is being employed; and
 - the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;
 - (d) describe the proposed noise management system on site; and
 - (e) include a quarterly (or as otherwise agreed with the Secretary) noise monitoring program that:
 - uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent;
 - evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and
 - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

AIR QUALITY

Air Quality Criteria

7. The Applicant **must** implement all reasonable and feasible avoidance and mitigation measures so that particulate matter emissions generated by the development do not exceed the criteria in Tables 3 to 6 at any residence on privately-owned land.

Table 3: Long-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Total suspended particulates (TSP)	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 4: Short-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 5: Long-Term Criteria for Deposited Dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Table 6: Long and Short-Term Stack Emissions

Pollutant	Averaging period	^d Criterion
Sulphur Dioxide	10-minute	712 µg/m ³
	1-Hour	570 µg/m ³
	24-Hour	228 µg/m ³
	Annual	60 µg/m ³
Nitrogen Dioxide	1-Hour	246 µg/m ³
	Annual	62 µg/m ³
Hydrogen Chloride	1 hour	0.14 mg/m ³

Notes to Tables 3-6:

- ^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).
- ^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).
- ^c 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, illegal activities or any other activity agreed by the Secretary in consultation with EPA.

Operating Conditions

8. The Applicant **must**:
 - (a) implement all reasonable and feasible measures to minimise the stack and dust emissions of the development;
 - (b) minimise surface disturbance and maximise progressive rehabilitation;
 - (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note (d) to Tables 3-6 above); and
 - (d) monitor and report on compliance with the relevant air quality conditions in this consent; to the satisfaction of the Secretary.

Air Quality Management Plan

9. The Applicant **must** prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (c) describe the measures that would be implemented to ensure:
 - compliance with the air quality criteria and operating conditions under this consent;
 - best practice management is being employed; and
 - the air quality impacts of the development are minimised during adverse meteorological conditions;
 - (d) describe the air quality management system; and
 - (e) include an air quality monitoring program that:
 - evaluates and reports on:
 - the effectiveness of the air quality management system; and
 - compliance with the air quality criteria and operating conditions; and
 - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

METEOROLOGICAL MONITORING

10. For the life of the development, the Applicant **must** ensure that there is a suitable meteorological station operating in the vicinity of the site that:
- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
 - (b) is capable of continuous measurement of stability class, in accordance with the *NSW Industrial Noise Policy*, or as otherwise approved by EPA.

TRANSPORT

Monitoring of Product Transport

11. The Applicant **must** keep accurate records of the:
- (a) **tonnage** of bricks transported from the site (monthly and annually);
 - (b) amount of raw material imported to the site (monthly and annually); and
 - (c) **tonnage of each type of raw materials imported to the site (monthly and annually);** and provide the Secretary with a summary of this information upon request.

Parking

12. The Applicant **must** provide sufficient parking on-site for all development-related traffic, in accordance with Camden Council's parking codes, to the satisfaction of the Secretary.

Operating Conditions

13. The Applicant **must** ensure that:
- (a) all development-related heavy vehicles enter and exit the site in a forward direction;
 - (b) all laden vehicles entering or exiting the site have their loads covered (with the exception of vehicles carrying bricks);
 - (c) all laden vehicles that have accessed the extraction and/or stockpile areas are cleaned of sand and other material that may fall on the road, before leaving the site;
 - (d) all heavy vehicles exiting the site travel east of the site along Greendale Road to The Northern Road and/or Bringelly Road;
 - (e) the dispatch of laden trucks is avoided during the peak drop-off and pick-up times at the Bringelly Public School to the greatest extent practicable, particularly prior to the upgrade of the Greendale Road/Bringelly Road intersection by RMS; and
 - (f) no trucks queue at the entrance to the site before 6am.

Access Road Intersection Construction

14. Within 12 months of commencing development under this consent, unless otherwise agreed with the Secretary, the Applicant must design and construct the new site access road intersection with Greendale Road in accordance with applicable AUSTROADS standards, to the satisfaction of Camden Council. The Applicant must notify the Secretary in writing within 30 days of obtaining Council approval.

Within 7 days of completing construction and the new site access road being operational, the existing site access road must be permanently closed.

Transport Management Plan

15. The Applicant **must** prepare a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with RMS, Camden Council, Liverpool City Council and Bringelly Public School, and be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (b) describe the measures that would be implemented to ensure compliance with the transport operating conditions under this consent, including specific measures to avoid **the arrival and**

- [dispatch](#) of laden trucks from the site during the peak drop-off and pick-up times at the Bringelly Public School;
- (c) include a Code of Conduct for heavy vehicle drivers that addresses:
- travelling speeds;
 - [procedures to minimise noise including a regular Truck Noise Auditing Program](#);
 - [procedures to minimise diesel exhaust emissions](#);
 - instructions to avoid grouping or convoying of trucks;
 - procedures to ensure that drivers adhere to the designated haulage routes and the haulage hours permitted under this consent;
 - instructions to drivers not to overtake each other on the haulage route, as far as practicable, and to maintain appropriate distances between vehicles; and
 - instruction to drivers to be properly safety conscious and to strictly obey all traffic regulations, particularly in relation to school zones along Greendale Road; and
- (d) describe the measures that would be put in place to ensure compliance with the drivers' Code of Conduct and include a program to monitor the effectiveness of the implementation of these measures.

[The Applicant must implement the approved management plan as approved from time to time by the Secretary.](#)

SOIL AND WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater.

Water Supply

16. The Applicant [must](#) ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply to the satisfaction of the Secretary.

Water Discharges

17. The Applicant [must](#) comply with the discharge limits in any EPL or with Section 120 of the POEO Act.

Water Management Plan

18. The Applicant [must](#) prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified person/s approved by the Secretary;
 - (b) be prepared in consultation with the EPA and [DPI Water](#);
 - (c) be submitted to the Secretary for approval [prior to the commencement of development under this consent](#), unless the Secretary agrees otherwise;
 - (d) include a Site Water Balance that:
 - includes details of:
 - quantity of water required to support operations;
 - sources and security of water supply;
 - water use and management on site;
 - reporting procedures; and
 - measures to be implemented to minimise potable water use on site;
 - (e) include a Surface Water Management Plan, that includes:
 - baseline data on surface water flows and quality in the watercourses that could be affected by the development;
 - a description of the surface water management system on site, including:
 - clean water diversions;
 - erosion and sediment controls;
 - the dirty water management system; and
 - water storages (addressing maximum harvestable rights if applicable);
 - performance criteria, including trigger levels for investigating any potentially adverse surface water quality impacts;
 - a program to monitor and report on:
 - any surface water discharges;

- the effectiveness of the water management system; and
 - surface water flows and quality in local watercourses;
 - a plan to respond to any exceedances of the performance criteria.
- (f) a Groundwater Management Plan, which includes:
- baseline data on groundwater levels, yield and quality in surrounding aquifers;
 - groundwater assessment and performance criteria, including trigger levels for investigating potentially adverse groundwater impacts;
 - a program to monitor:
 - groundwater inflows to the quarry pit; and
 - impacts of the development on surrounding aquifers;
 - an analysis of the monitoring results to determine long-term water levels within the quarry void; and
 - a plan to respond to any exceedances of the performance criteria.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

BIODIVERSITY

Biodiversity Offset Strategy

19. The Applicant **must** implement the Biodiversity Offset Strategy described in the EIS, as summarised in Table 7 and shown conceptually in Appendix 4, to the satisfaction of the Secretary.

Table 7: Summary of the Biodiversity Offsets

Area	Offset Criteria	Size (Ha)
On-site offset	Existing vegetation to be enhanced to establish an area of native woodland comprising species associated with Cumberland Plain Woodland.	1.93

Security of Offsets

20. Within 2 years of **notifying the Department of commencement of development (see condition 8 of Schedule 2)**, unless otherwise agreed with the Secretary, the Applicant **must** make suitable arrangements to provide appropriate long-term security for the offset area, to the satisfaction of the Secretary.

Note: Mechanisms to provide appropriate long term security to the land within the Biodiversity Offset Strategy include a Biobanking Agreement, Voluntary Conservation Agreement or an alternative mechanism that provides for a similar conservation outcome. Any mechanism must remain in force in perpetuity.

Biodiversity Management Plan

21. The Applicant **must** prepare a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the OEH and Camden Council;
 - (b) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - (c) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;
 - (d) describe the short, medium, and long term measures that would be implemented to:
 - manage the remnant vegetation and habitat on the site and in the offset area and;
 - implement the biodiversity offset strategy, including detailed performance and completion criteria;
 - (e) include performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);
 - (f) include a description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
 - maximising the salvage of resources within the approved disturbance area - including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;

- minimising the impacts on fauna on site, including pre-clearance surveys and minimising the potential exposure to tailings;
 - controlling weeds and feral pests;
 - controlling erosion;
 - controlling access; and
 - bushfire management;
- (g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
- (h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

Conservation Bond

22. Within 6 months of the approval of the Biodiversity Management Plan, the Applicant **must** lodge a conservation bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.

The sum of the bond **must** be determined by:

- a. calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and
- b. employing a suitably qualified quantity surveyor to verify the calculated costs,
- c. to the satisfaction of the Secretary.

The calculation of the conservation bond must be submitted to the Department for approval at least 1 month prior to lodgement of the final bond.

If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.

If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.

Notes:

- *Alternative funding arrangements for long term management of the biodiversity offset strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to conservation reserve estate (or any other mechanism agreed with OEH) can be used to reduce the liability of the conservation bond.*
- *The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy or the completion of major milestones within the approved plan.*

REHABILITATION

Rehabilitation Objectives

23. The Applicant **must** rehabilitate the site to the satisfaction of the Secretary. Rehabilitation must:
- a. comply with the objectives in Table 8; and
 - b. be generally consistent with the proposed rehabilitation strategy in the EIS, and the final land form shown conceptually in Appendix 4 (unless modified by the Final Land Use Options Plan, prepared in accordance with condition 25 of this consent).

Table 8: Rehabilitation Objectives

Feature	Objective
Site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native species and habitat

Surface infrastructure	<ul style="list-style-type: none"> To be decommissioned and removed (unless the Secretary agrees otherwise)
Final void	<ul style="list-style-type: none"> Minimise the size, depth and slope of the batters of the final void Minimise the drainage catchment of the final void
Quarry pit floor	<ul style="list-style-type: none"> Landscaped and revegetated using native flora species, above the anticipated final void water level
Community	<ul style="list-style-type: none"> Ensure public safety

Progressive Rehabilitation

24. The Applicant **must** rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible 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.

Final Land Use Options Plan

25. The Applicant **must** prepare a Final Land Use Options Plan for the site to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with DRE and Camden Council;
 - be submitted to the Secretary for approval within 2 years of the date of [notifying the Department of commencement of development \(see condition 8 of Schedule 2\)](#), unless the Secretary agrees otherwise;
 - provide details of the conceptual final landform and associated final land uses for the site;
 - ensure that the conceptual final land form is compatible with surrounding land uses, and is consistent with the rehabilitation objectives in Table 8 and the objectives of the Growth Centres SEPP for the South West Growth Centre;
 - inform the Rehabilitation Management Plan (prepared in accordance with condition 26 of this consent); and
 - be reviewed every 7 years to account for applicable land use priorities, and if necessary updated.

Rehabilitation Management Plan

26. The Applicant **must** prepare a Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH, DRE, [DPI Water](#) and Camden Council;
 - be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - provide details of the conceptual final landform and associated land uses for the site (which must be consistent with the Final Land Use Options Plan under condition 25 of this consent);
 - describe the short, medium and long term measures that would be implemented to:
 - manage remnant vegetation and habitat on site; and
 - ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
 - include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, including triggers for any necessary remedial action;
 - include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; and
 - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

[The Applicant must implement the approved management plan as approved from time to time by the Secretary.](#)

Note: The Rehabilitation Management Plan must be reviewed, and if necessary updated, following any update of the Final Land Use Options Plan.

HERITAGE

Heritage Management Plan

27. The Applicant **must** prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH;
 - (a) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - b. describe the measures that would be implemented to:
 - manage identified heritage objects, previously unidentified heritage objects or the discovery of any human remains on site;
 - ensure ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal cultural heritage values on site; and
 - protect sites identified adjacent to the development.

The Applicant **must** implement the approved management plan as approved from time to time by the Secretary.

VISUAL

28. The Applicant **must** establish a vegetation screen on both noise bunds, as soon as practicable after construction of the bunds, to minimise visibility of site infrastructure from outside the development area. Following establishment, the Applicant **must** maintain the vegetation screen, to the satisfaction of the Secretary.
29. The Applicant **must**:
- implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development; and
 - b) ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version.

BUSHFIRE MANAGEMENT

30. The Applicant **must**:
- ensure that the development is suitably equipped to respond to any fires on site; and
 - b) assist the Rural Fire Service, emergency services and National Parks and Wildlife Service as much as practicable if there is a fire in the surrounding area.

WASTE

31. Prior to importing onto the site any material that may be classified as a waste under the EPA *Waste Classification Guidelines 2009* (or its latest version), the Applicant must obtain a 'resource recovery exemption' under the POEO Act and provide evidence of this exemption to the Department.

Note: This condition does not apply to routine deliveries to the site.

32. The Applicant **must**:
- manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Camden Council; and
 - b) pump all sewage generated and stored on-site to a sewage treatment facility, unless otherwise agreed with the Secretary.
33. The Applicant **must**:
- minimise the waste generated by the development;
 - b) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
 - c) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. As soon as practicable after obtaining monitoring results showing an exceedance of any relevant criteria in schedule 3, the Applicant **must** notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria.

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant **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 development is complying with the relevant criteria in schedule 3;
 - if the development is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.

The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.

Adaptive Management

2. The Applicant must assess and manage development-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 consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.

Management Plan Requirements

3. The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:

- impacts and environmental performance of the development; and
- effectiveness of any management measures (see (c) above);
- (e) a contingency plan to manage any unpredicted impacts and their consequences;
- (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
- (g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Annual Review

4. By the end of September each year, the Applicant [must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary](#). This review must:
 - (a) describe the development (including rehabilitation) that was carried out in the previous [financial](#) year, and the development that is proposed to be carried out over the current [financial](#) year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous [financial](#) year, which includes a comparison of these results against:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years; and
 - the relevant predictions in the [documents in condition 2\(a\) of Schedule 2](#);
 - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the current [financial](#) year to improve the environmental performance of the development.

Revision of Strategies, Plans and Programs

5. [Within 3 months of the submission of an:](#)
 - (a) [Annual Review under condition 4 above;](#)
 - (b) [incident report under condition 7 below;](#)
 - (c) [audit report under condition 9 below; and](#)
 - (d) [any modifications to this consent,](#)
 the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.

Note: 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 development.

Community Consultative Committee

6. The Applicant [must](#) establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the [Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments](#) (Department of Planning, 2007, or its latest version), and be operating [prior to the commencement of development under this consent](#).

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*

- In accordance with the guideline, the Committee should comprise an independent chair and appropriate representation from the Applicant, Camden Council and the local community.

REPORTING

Incident Reporting

7. The Applicant **must** immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant **must** provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

8. The Applicant **must** provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

INDEPENDENT ENVIRONMENTAL AUDIT

9. Within a year of **commencing development under this consent**, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant **must** commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licence (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategy, plan or program required under these approvals;
 - (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals; **and be conducted and reported to the satisfaction of the Secretary.**

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

10. Within **12 weeks of commencing** this audit, unless the Secretary agrees otherwise, the Applicant **must** submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.

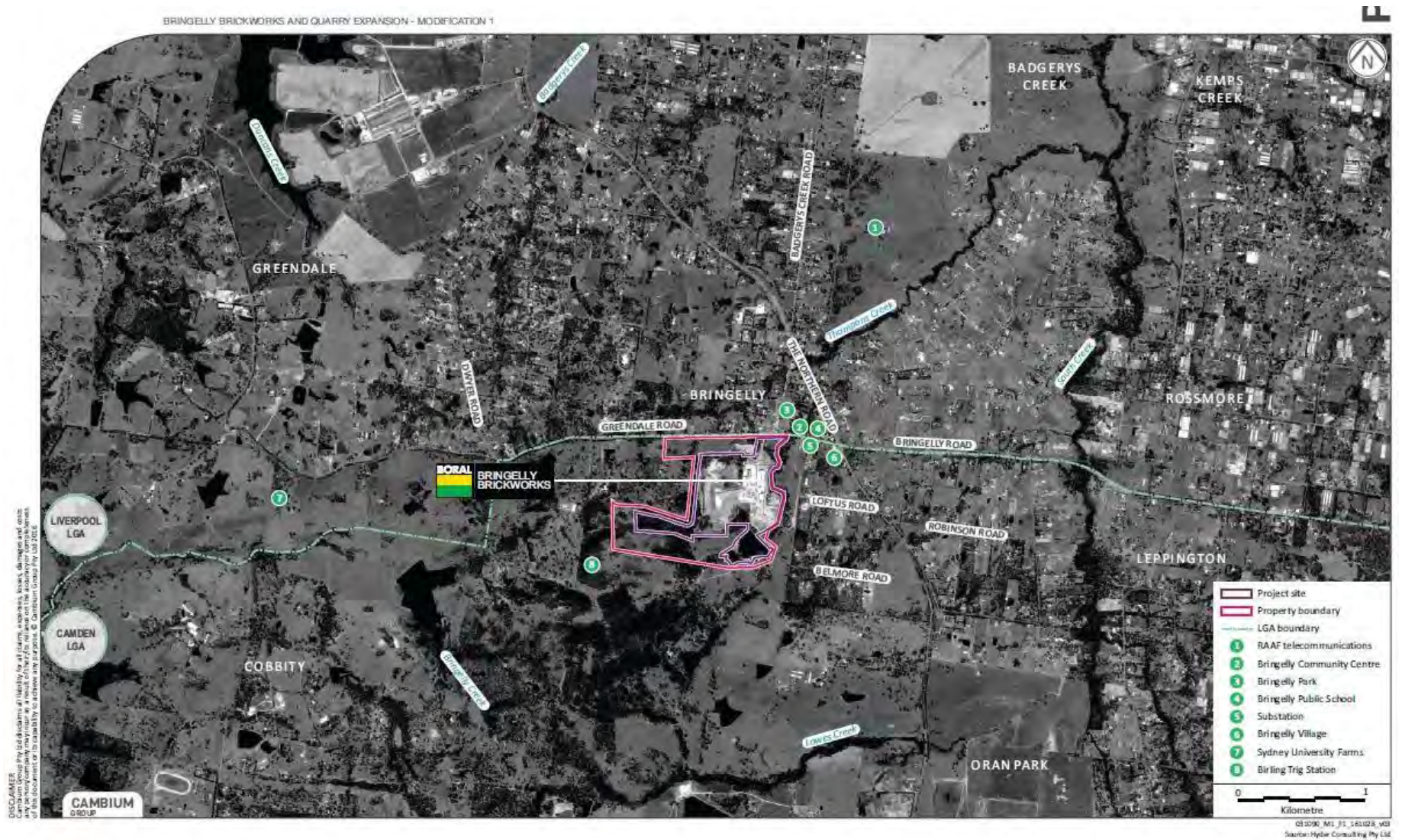
Within 7 days of commencing the audit, the Applicant must notify the Department in writing of the commencement of the audit.

ACCESS TO INFORMATION

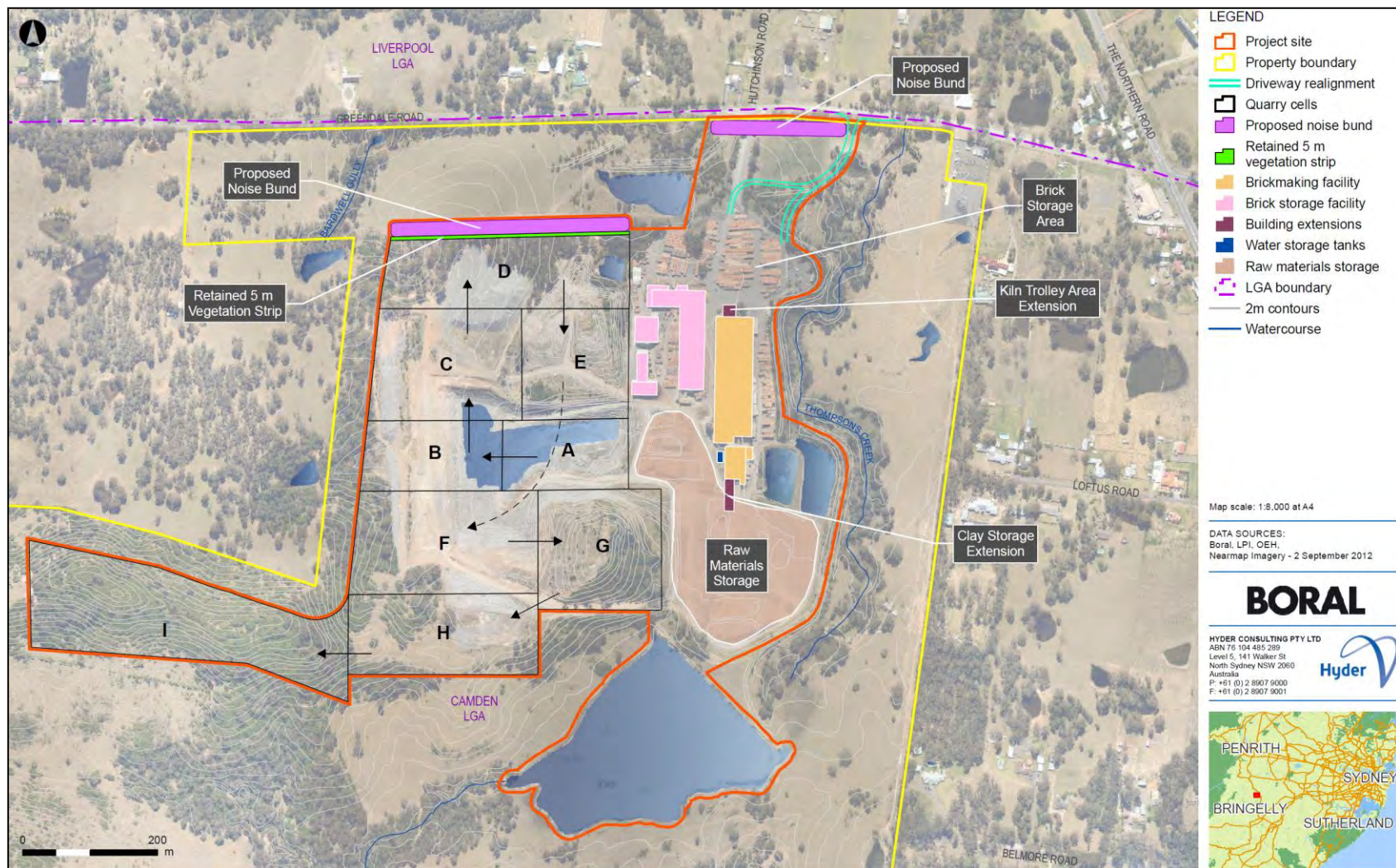
11. Within 6 months of **commencing development under this consent**, the Applicant **must**:
 - (a) make copies of the following publicly available on its website:
 - the documents in **condition 2(a) of Schedule 2**;
 - current statutory approvals for the development;
 - approved strategies, plans and programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - a complaints register, which is to be updated monthly;
 - minutes of CCC meetings;
 - the annual reviews of the development (for the last 5 years);
 - any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit;
 - any other matter required by the Secretary; and

(b) keep this information up-to-date,
to the satisfaction of the Secretary.

APPENDIX 1 DEVELOPMENT AREA



APPENDIX 2 DEVELOPMENT LAYOUT



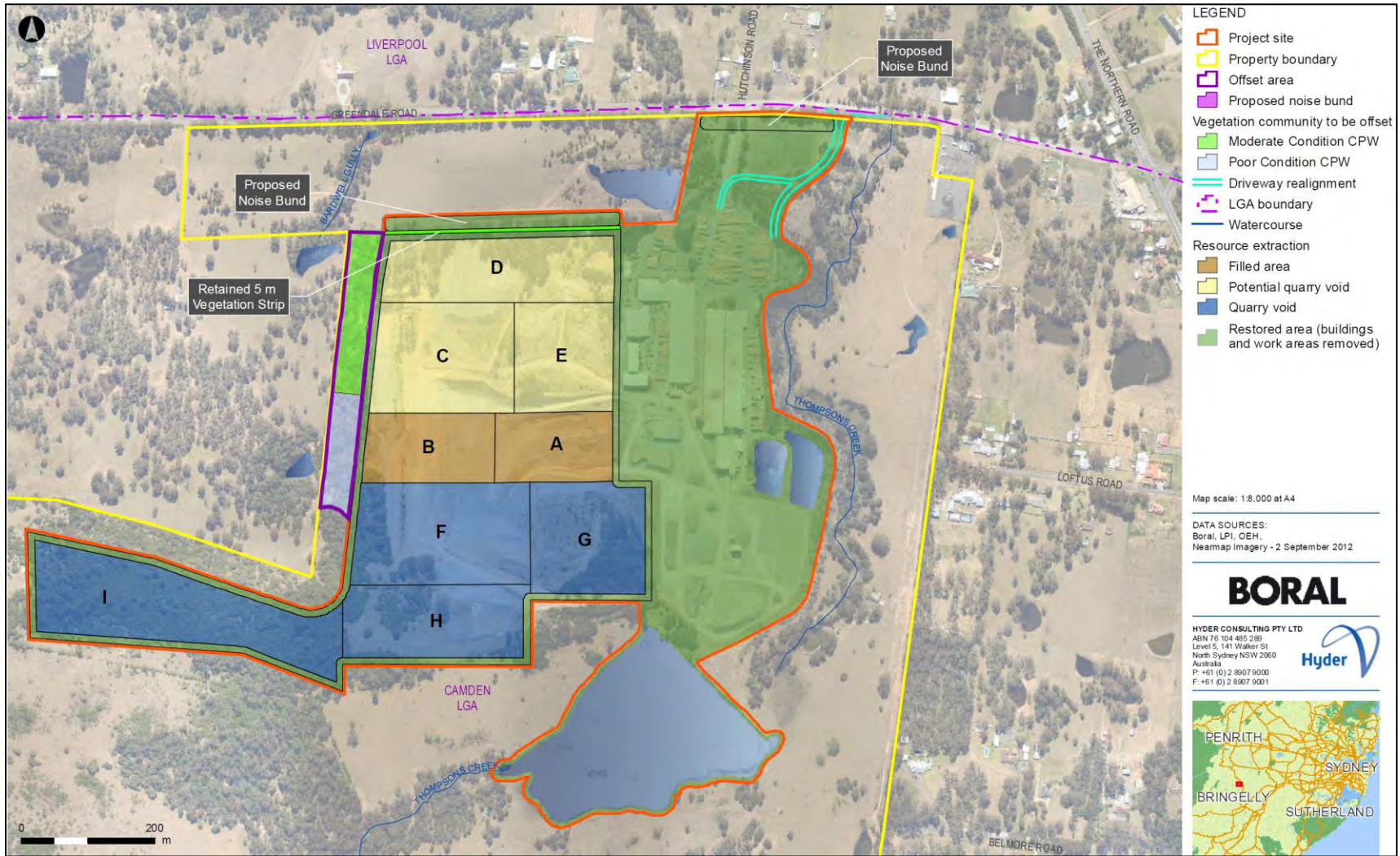
APPENDIX 3 RECEIVER LOCATIONS



Receiver number	Receiver address
1	55 Loftus Road
2	54 Loftus Road
3	20 Greendale Road
4	9 Greendale Road
5	5 Greendale Road (Bringelly Community Centre)
6	46 Loftus Road
7	36 Loftus Road
8	47 Loftus Road
9	37 Loftus Road
10	27 Loftus Road
11	26 Loftus Road
12	15 Loftus Road
13	5 Loftus Road
14	23 Greendale Road
15	27 Greendale Road
16	29 Greendale Road
17	25 Greendale Road
18	31 Greendale Road
19	35 Greendale Road
20	170 Tyson Road
21	196 Greendale Road
22	46 Belmore Road
23	55 Belmore Road
24	63 Belmore Road
25	67 Belmore Road
26	73 Belmore Road
27	83-85 Belmore Road
28	76 Belmore Road
29	86 Belmore Road
30	87 Belmore Road
31	93 Belmore Road
32	95-97 Belmore Road
33	107 Belmore Road
34	96 Belmore Road
35	108 Belmore Road
36	1037 Northern Road
37	10 Greendale Road
38	Bringelly Public School

APPENDIX 4

CONCEPTUAL FINAL LANDFORM AND BIODIVERSITY OFFSET STRATEGY



APPENDIX 5 NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Table 2 of the conditions are to apply under all meteorological conditions except the following:
 - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
 - (b) temperature inversion conditions between 1.5 °C and 3°C/100 m and wind speeds greater than 2 m/s at 10 m above ground level; or
 - (c) temperature inversion conditions greater than 3°C/100 m.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions **must** be that recorded by the meteorological station on or in the vicinity of the site.

Compliance Monitoring

3. Unless directed otherwise by the Secretary, quarterly attended monitoring is to be used to evaluate compliance with the relevant conditions of consent.

Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.

4. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
 - (a) monitoring locations for the collection of representative noise data;
 - (b) meteorological conditions during which collection of noise data is not appropriate;
 - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
 - (d) modifications to noise data collected including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

Appendix B

Notification of SSD_5684 Mod 1 Activation

Triniti 3, 39 Delhi Road, North Ryde, NSW 2113
Locked Bag 1345, North Ryde, BC 1670
T 61 2 9235 8000
F 61 2 8362 9005
ABN 68 168 794 821



18 February 2020

BY EMAIL matthew.sprott@planning.nsw.gov.au

Mr Matthew Sprott
Director Resource Assessments
Department of Planning, Industry and Environment
12 Darcy Street
PARRAMATTA NSW 2150

Dear Mr Sprott

Notice of Commencement of Mod 1 to SSD 5684 - Bringelly Brickworks Extension Project

PGH Bricks and Pavers Pty Limited (**PGH**) owns the Bringelly Brickworks Extension Project (SSD_5684) located at Greendale Rd, Bringelly (**Site**) which was modified on 31 October 2016 (**Project Approval**).

In accordance with condition 8 of Schedule 2 of the Project Approval, we write to notify the Department of Planning, Industry and Environment (**Department**) that PGH intends to commence development under the Project Approval on 24 February 2020 by carrying out surveying works for the construction of a noise bund at the Site (**Works**).

As you will be aware, surveying works are part of engineering works and constitute physical commencement for the purpose of section 4.53(4) of the *Environmental Planning and Assessment Act 1979* (NSW) (see *Hunter Development & Brokerage Pty Ltd v Cessnock City Council [2005] NSWCA 169*).

All relevant management plans have been approved with the exception of the following:

Biodiversity Management Plan – condition 21 of Schedule 3; and,

Rehabilitation Management Plan – condition 26 of Schedule 3.

In accordance with condition 15 of Schedule 2 of the Project Approval, PGH will implement the existing strategies and plans for the Site that have been approved under DA 91/1194 until such time as the updated Biodiversity and Rehabilitation Management Plans are approved.

Please call to discuss if you have any questions regarding the matters raised in this letter.

Yours faithfully

Debbie Cook
National WHSE Manager- PGH Bricks and Pavers Pty Limited

Appendix C

Notification of Surrender of DA91/1194

28 July 2020

Attention: Bradley Collits
Compliance Team
Camden Council
37 John Street
Camden
NSW 2570
Via email: mail@camden.nsw.gov.au

RE: BRINGELLY BRICKWORKS (SSD_5684) – CONDITION 9 OF SCHEDULE 2, VOLUNTARY SURRENDER OF DA 91/1194

Dear Bradley,

The Bringelly Brickworks has been in operation since 1968, and in its original form it had the capacity to process approximately 51,500 tonnes of bricks per annum. In 1991, development approval was sought to upgrade the facilities with 'new' technology and increase production to ensure the continued economic viability of the site due to the age of the manufacturing plant and machinery. Camden Council subsequently issued a development approval on 13 September 1991 (Council ref. DA 91/1194) which permitted (among other things) quarry extraction up to 200,000 tonnes per annum and brick production up to 160,000 tonnes per annum.

In November 2012 Boral Bricks (NSW) Pty Ltd submitted a State Significant Development (SSD) application for proposed expansion of the Bringelly Brickworks. The SSD application primarily sought an increase in brick production volumes and a subsequent expansion in the quarry area. Director-General requirements were issued on 24 December 2012 and following the public exhibition of the Environmental Impact Statement from 6 November 2013 to 9 December 2013, development consent was granted on 3 March 2015 subject to Conditions of Approval (SSD_5684).

On the 1st May 2015, CSR Limited (CSR) and Boral Limited (Boral) formally completed the establishment of a joint venture, Boral CSR Bricks Pty Ltd, for operations located in New South Wales, Victoria, Queensland, South Australia, Tasmania and the ACT. Assets acquired from Boral included Bringelly Brickworks (Lot 11 DP 1125892, 60 Greendale Road, Bringelly).

On 1 November 2016 CSR acquired Boral's 40% interest in the Boral CSR Bricks joint venture, now trading as PGH Bricks Pty Limited (PGH).

PGH is required to surrender the pre-existing development consent (DA 91/1194) issued by Camden Council on 13 September 1991, in accordance with Section 104A of the *Environmental Planning and Assessment Act* (EP&A Act). The voluntary surrender of DA 91/1194 will then ensure that SSD_5684 is the only approval instrument for the Bringelly Brickworks.

It is noted that Camden Council do not have a pro forma 'Notice of voluntary surrender of a development consent' available on their website, therefore in accordance with condition 9 of schedule 2 of SSD_5684, this letter serves to formally notify Camden Council of PGH's intention to voluntarily surrender DA 91/1194 in accordance with Section 104A of the EP&A Act and clause 97(3) of the *Environmental Planning & Assessment Regulation 2000* (EP&A Regulations).

Clause 97(3) of EP&A regulations states the following,

"A notice of voluntary surrender of a development consent, as referred to in section 104A of the Act, is to be given to the consent authority and is to include the following information:

- (a) the name and address of the person by whom the notice is given,*
- (b) the address, and formal particulars of title, of the land to which the consent relates,*
- (c) a description of the development consent to be surrendered,*
- (d) if the person giving the notice is not the owner of the land, a statement signed by the owner of the land to the effect that the owner consents to the surrender of the consent,*

(e) if development has commenced to be carried out in accordance with the consent—a statement setting out the circumstances that indicate:

(i) that so much of the development as has been carried out has been carried out in compliance with any condition of the consent, or any agreement with the consent authority relating to the consent, that is relevant to that part of the development, and

(ii) that the surrender will not have an adverse impact on any third party or the locality"

Table 1 presents the information required under clause 97(3) of EP&A Regulations.

Table 1 Clause 97(3) Surrender Details

Sub-clause	Details
(a) the name and address of the person by whom the notice is given	Name: Ms Debbie Cook Address: Trinit 3, 39 Delhi Road, North Ryde, NSW 2113
(b) the address, and formal particulars of title, of the land to which the consent relates	Address: 60 Greendale Road, Bringelly Particulars of title: Lot 11 DP 1125892
(c) a description of the development consent to be surrendered	Council Reference: DA 91/1194 DA Description: Designated Development – Extension and upgrading of existing brick and paver manufacturing unit. Determination date: 13 September 1991
(d) if the person giving the notice is not the owner of the land, a statement signed by the owner of the land to the effect that the owner consents to the surrender of the consent,	Nor Applicable
(e) if development has commenced to be carried out in accordance with the consent—a statement setting out the circumstances that indicate: (i) that so much of the development as has been carried out has been carried out in compliance with any condition of the consent, or any agreement with the consent authority relating to the consent, that is relevant to that part of the development, and (ii) that the surrender will not have an adverse impact on any third party or the locality	(e)(i) Development, as approved by DA 91/1194, commenced following the determination by Camden Council in September 1991. Plans approved by Camden Council include the following: <ul style="list-style-type: none"> • Approved site plan (T1910-3M); • Approved clay preparation building plan (1980-006-1010); • Approved crusher building plan (1980-005-1010); • Approved manufacturing building plan (1980-007-1010). (e) In accordance with condition 9 of schedule 2 of SSD_5684, prior to the surrender of DA 91/1194, the conditions of SSD_5684 (including any notes) shall prevail to the extent of any inconsistency. Following the acceptance of this voluntary surrender, SSD_5684 will be the only approval instrument for the Bringelly Brickworks and the consent authority shall be DP&E.

If you have any questions, please do not hesitate to contact the undersigned.

Kind regards,



Debbie Cook
 National WHSE Manager
 PGH Bricks and Pavers Pty Limited

Appendix D

Mine Lease

Conditions

MINING LEASE

MINING ACT 1992

NO 1731

DATED 09 MARCH 2016

MINISTER FOR INDUSTRY RESOURCES
AND ENERGY

OF THE STATE

OF NEW SOUTH WALES

TO

BORAL CSR BRICKS PTY LIMITED
ACN 168 794 821

Mining Lease

Section 63 of the *Mining Act 1992*

I, as delegate of the Minister for Industry Resources and Energy for the State of New South Wales, under delegation dated 9 February 2016 pursuant to section 63 of the *Mining Act 1992*, determine Mining Lease Application No **508** by granting a Mining Lease as described in Schedule 1 to **BORAL CSR BRICKS PTY LIMITED, ACN 168 794 821**, subject to the conditions set out in Schedule 2.

The conditions set out in Schedule 2 are required to:

- ensure optimal resource recovery;
- prevent, minimise, and offset adverse environmental impacts;
- provide for the ongoing environmental management of the project; and
- ensure that the areas disturbed by mineral production and exploration activities are appropriately rehabilitated.

The rights and duties of a Lease Holder are those prescribed by the *Mining Act 1992*, subject to the terms and conditions of this Lease. This lease does not override any obligation on the Lease Holder to comply with the requirements of other legislation and regulatory instruments which may apply to the Lease Holder (including all relevant development approvals) unless specifically provided in the *Mining Act 1992* or other legislation or regulatory instruments.



SIGNED

Under delegation

Bryan Whitlock
Manager Royalty and Advisory Services

Dated: 9/3/16

SCHEDULE 1

Description of Lease

Land: The lease area embraces all land described in the attached lease plan titled **M27393** and approved on **21 January 2016**.

Area: **37.25 Hectares**

Minerals/ Mining Purpose: **Clay / Shale**

Method: **Open Cut**

Term: **21 Years**

Due expiry date: **9 March 2037**

SCHEDULE 2
MINING LEASE CONDITIONS 2013

Definitions

- 1. Notice to Landholders**
- 2. Rehabilitation**
- 3. Mining Operations Plan and Annual Rehabilitation Report**
- 4. Compliance Report**
- 5. Environmental Incident Report**
- 6. Resource Recovery**
- 7. Security**
- 8. Cooperation Agreement**

Note: Exploration Reports (Geological and Geophysical)

Definitions:

Words used in this mining lease have the same meaning as defined in the *Mining Act 1992* except where otherwise defined below:

Act means the *Mining Act 1992*.

Department means the Division of Resources & Energy within the Department of Industry, Skills and Regional Development.

Environment has the same meaning as in the *Protection of the Environment Operations Act 1997*.

Harm to the environment has the same meaning as in the *Protection of the Environment Operations Act 1997*.

Landholder for the purposes of these conditions does not include a secondary landholder and includes, in the case of exempted areas, the controlling body for the exempted area.

Material harm to the environment has the same meaning as in the *Protection of the Environment Operations Act 1997*.

Minister means the Minister administering the Act.

Pollution incident has the same meaning as in the *Protection of the Environment Operations Act 1997*.

MINING LEASE CONDITIONS 2013

1. Notice to Landholders

- (a) Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.
- (b) If there are ten or more landholders, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.

2. Rehabilitation

Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.

3. Mining Operations Plan and Annual Rehabilitation Report

- (a) The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.
- (b) The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which:
- (i) identifies areas that will be disturbed;
 - (ii) details the staging of specific mining operations, mining purposes and prospecting;
 - (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use;
 - (iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and
 - (v) reflects the conditions of approval under:
 - the *Environmental Planning and Assessment Act 1979*;
 - the *Protection of the Environment Operations Act 1997*; and

- any other approvals relevant to the development including the conditions of this mining lease.
- (c) The MOP must be prepared in accordance with the *ESG3: Mining Operations Plan (MOP) Guidelines September 2013* published on the Department's website at www.resources.nsw.gov.au/environment
- (d) The lease holder may apply to the Minister to amend an approved MOP at any time.
- (e) It is not a breach of this condition if:
- (i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the *Environmental Planning and Assessment Act 1979*, the *Protection of the Environment Operations Act 1997*, the *Mine Health and Safety Act 2004 / Coal Mine Health and Safety Act 2002* and *Mine Health and Safety Regulation 2007 / Coal Mine Health and Safety Regulation 2006* or the *Work Health and Safety Act 2011*; and
 - (ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.
- (f) The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must:
- (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP;
 - (ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and
 - (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resources.nsw.gov.au/environment.

Note: The Rehabilitation Report replaces the Annual Environmental Management Report.

4. Compliance Report

- (a) The lease holder must submit a Compliance Report to the satisfaction of the Minister. The report must be prepared in accordance with any relevant guidelines or requirements published by the Minister for compliance reporting.
- (b) The Compliance Report must include:
- (i) the extent to which the conditions of this mining lease or any provisions of the Act or the regulations applicable to activities under this mining lease, have or have not been complied with;
 - (ii) particulars of any non-compliance with any such conditions or provisions,
 - (iii) the reasons for any such non-compliance;

- (iv) any action taken, or to be taken, to prevent any recurrence, or to mitigate the effects, of that non-compliance.
- (c) The Compliance Report must be lodged with the Department annually on the grant anniversary date for the life of this mining lease.
- (d) In addition to annual lodgement under condition 4(c) above, a Compliance Report:
 - (i) must accompany any application to renew this mining lease under the Act;
 - (ii) must accompany any application to transfer this mining lease under the Act; and
 - (iii) must accompany any application to cancel, or to partially cancel, this mining lease under the Act.
- (e) Despite the submission of any Compliance Report under (c) or (d) above, the titleholder must lodge a Compliance Report with the Department at any date or dates otherwise required by the Minister.
- (f) A Compliance Report must be submitted one month prior to the expiry of this mining lease, where the licence holder is not seeking to renew or cancel this mining lease.

5. Environmental Incident Report

- (a) The lease holder must notify the Department of all:
 - (i) breaches of the conditions of this mining lease or breaches of the Act causing or threatening material harm to the environment; and
 - (ii) breaches of environmental protection legislation causing or threatening material harm to the environment (as defined in the *Protection of the Environment Operations Act 1997*),

arising in connection with significant surface disturbing activities, including mining operations, mining purposes and prospecting operations, under this mining lease. The notification must be given immediately after the lease holder becomes aware of the breach.

Note. Refer to www.resources.nsw.gov.au/environment for notification contact details.

- (b) The lease holder must submit an Environmental Incident Report to the Department within seven (7) days of all breaches referred to in condition 5(a)(i) and (ii). The Environmental Incident Report must include:
 - (i) the details of the mining lease;
 - (ii) contact details for the lease holder;
 - (iii) a map identifying the location of the incident and where material harm to the environment has or is likely to occur;

- (iv) a description of the nature of the incident or breach, likely causes and consequences;
- (v) a timetable showing actions taken or planned to address the incident and to prevent future incidents or breaches referred to in 5(a).
- (vi) a summary of all previous incidents or breaches which have occurred in the previous 12 months relating to significant surface disturbing activities, including mining operations, mining purposes and prospecting operations under this mining lease.

Note. The lease holder should have regard to any relevant Secretary's guidelines in the preparation of an Environmental Incident Report. Refer to www.resources.nsw.gov.au/environment for further details.

- (c) In addition to the requirements set out in conditions 5(a) and (b), the lease holder must immediately advise the Department of any notification made under section 148 of the *Protection of the Environment Operations Act 1997* arising in connection with significant surface disturbing activities including mining operations, mining purposes and prospecting operations, under this mining lease.

6. Resource Recovery

The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.

7. Security

The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future.

The amount of the security deposit to be provided has been assessed by the Minister at **\$776,000**.

8. Cooperation Agreement

The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as:

- access arrangements
- operational interaction procedures
- dispute resolution
- information exchange
- well location
- timing of drilling
- potential resource extraction conflicts; and
- rehabilitation issues.

Exploration Reporting

Note: Exploration Reports (Geological and Geophysical)

The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 57 of the Mining Regulation 2010.

Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales (Department of Trade and Investment; Regional Infrastructure and Services 2010).

SPECIAL CONDITIONS

Note: The standard conditions apply to all mining leases. The Division of Resources & Energy (DRE) reserves the right to impose special conditions, based on individual circumstances, where appropriate.

By Certificate of Registration on Change of Name Boral CSR Bricks Pty Limited ACN 168 794 821 changed its name to PGH Bricks And Pavers Pty Limited ACN 168794821 on 04. November 2016. Recorded in the Department of Resources and Geoscience this 15. August 2017 against the following titles:-

Mining Lease Application 519 (Act 1992)
Mining Lease 1730 (Act 1992)
Mining Lease 1731 (Act 1992)
Private Lands Lease 1236 (Act 1924)

Chris Berry
TITLES SERVICES
FOR SECRETARY

INSTRUMENT OF VARIATION

I, as delegate of the Minister for Resources for the State of New South Wales, under delegation dated 1 May 2017, and pursuant to Clause 12 of Schedule 1B of the *Mining Act 1992*, vary ML 1731 (1992) as follows:

Conditions 4 and 5 are varied by deleting the existing conditions and inserting instead the conditions set out below:

4. Non-Compliance Reporting

- (a) The lease holder must notify the Department upon becoming aware of any breaches of the conditions of this mining lease or breaches of the Mining Act or Regulations;
- (b) Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.

5. Environmental Incident Report

The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the *Protection of the Environment Operations Act 1997*.

Definitions

Environmental incident notifications and reports means any notifications and reports required to be provided to relevant authorities under Part 5.7 or Part 5.7A of the *Protection of the Environment Operations Act 1997*.

This variation is effective from 19 February 2018.

SIGNED



As delegate for the Minister for Resources

Steven Palmer
Acting Director Title Services
Dated 19 February 2018

Appendix E

EPA Licence

Environment Protection Licence

Licence - 1808

Licence Details

Number:	1808
Anniversary Date:	01-June

Licensee

PGH BRICKS & PAVERS PTY LIMITED

LOCKED BAG 1345

NORTH RYDE NSW 1670

Premises

BRINGELLY

LOT 2 GREENDALE ROAD

BRINGELLY NSW 2556

Scheduled Activity

Ceramic works

Crushing, grinding or separating

Extractive activities

Mining for minerals

Fee Based Activity

Scale

Ceramics production	> 50000-200000 T annual production capacity
Crushing, grinding or separating	> 100000-500000 T annual processing capacity
Land-based extractive activity	> 100000-500000 T annual capacity to extract, process or store
Mining for minerals	> 100000-500000 T annual production capacity

Region

Metropolitan South - Wollongong

Level 3, NSW Govt Offices, 84 Crown Street

WOLLONGONG NSW 2500

Phone: (02) 4224 4100

Fax: (02) 4224 4110

PO Box 513

WOLLONGONG EAST NSW 2520



Environment Protection Licence

Licence - 1808

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Environment Protection Licence

Licence - 1808



Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).



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The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

PGH BRICKS & PAVERS PTY LIMITED
LOCKED BAG 1345
NORTH RYDE NSW 1670

subject to the conditions which follow.

Environment Protection Licence

Licence - 1808

1 Administrative Conditions

A1 What the licence authorises and regulates

- A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Ceramic works	Ceramics production	> 50000 - 200000 T annual production capacity
Crushing, grinding or separating	Crushing, grinding or separating	> 100000 - 500000 T annual processing capacity
Extractive activities	Land-based extractive activity	> 100000 - 500000 T annual capacity to extract, process or store
Mining for minerals	Mining for minerals	> 100000 - 500000 T annual production capacity

A2 Premises or plant to which this licence applies

- A2.1 The licence applies to the following premises:

Premises Details
BRINGELLY
LOT 2 GREENDALE ROAD
BRINGELLY
NSW 2556
LOT 11 DP 1125892

A3 Information supplied to the EPA

- A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998;

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and

b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

<i>Air</i>			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
2	Discharge to Air; Air Emissions Monitoring	Discharge to Air; Air Emissions Monitoring	Kiln exhaust stack as marked on map showing locations of discharge points submitted to the EPA with Licence Information Form dated 9/05/00.

P1.2 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

P1.3 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

<i>Water and land</i>			
EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Discharge and Monitoring; Discharge to waters	Discharge and Monitoring; Discharge to waters	Outlet from Dam 1 on map labelled: Site Layout Plan, Figure 2, Water Management Plan dated 10.11.15 (EPA DOC15/464889-02). Discharge point is located on the NE corner of Dam 1.
5	Discharge and Monitoring; Discharge to waters	Discharge and Monitoring; Discharge to waters	Discharge from Dam 5 on map labelled: Site Layout Plan, Figure 2, Water Management Plan dated 10.11.15 (EPA DOC15/464889-02). Discharge point is located on the NW corner of Dam 5.



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3 Limit Conditions

L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Load limits

- L2.1 The actual load of an assessable pollutant discharged from the premises during the reporting period must not exceed the load limit specified for the assessable pollutant in the table below.
- L2.2 The actual load of an assessable pollutant must be calculated in accordance with the relevant load calculation protocol.

Assessable Pollutant	Load limit (kg)
Coarse Particulates (Air)	8400.00
Fine Particulates (Air)	33300.00
Fluoride (Air)	11700.00
Nitrogen Oxides - Summer (Air)	
Nitrogen Oxides (Air)	90300.00
Sulfur Oxides (Air)	186500.00

Note: An assessable pollutant is a pollutant which affects the licence fee payable for the licence.

L3 Concentration limits

- L3.1 For each monitoring/discharge point or utilisation area specified in the table\ below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.
- L3.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.
- L3.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\.
- L3.4 Air Concentration Limits

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POINT 2

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Total Solid Particles	milligrams per cubic metre	100			
Hydrogen fluoride	milligrams per cubic metre	50			
Nitrogen Oxides	milligrams per cubic metre	2000			

L3.5 Water and/or Land Concentration Limits

POINT 1

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Oil and Grease	milligrams per litre	-	-	-	10
pH	pH	-	-	-	6.5-8.5
Turbidity	nephelometric turbidity units	-	-	-	150

POINT 5

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Conductivity	microsiemens per centimetre	-	-	-	1450
Oil and Grease	milligrams per litre	-	-	-	10
pH	pH	-	-	-	6.5-8.5
Turbidity	nephelometric turbidity units	-	-	-	150

L3.6 Exceedance of a quality limit specified in this Licence for the discharge of total suspended solids or turbidity from Point 1 or Point 5 is only permitted if the discharge from Point 1 or Point 5 occurs solely as a result of rainfall. The rainfall must be equal to, or greater than, a 90th percentile 5-day rain event.

L3.7 For the purposes of Condition L3.6, a 90th percentile 5-day rain event equates to rainfall of 50

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millimetres over a consecutive five day period.

- L3.8 For the purposes of the condition(s) above, rainfall data recorded by the meteorological station identified as the Bureau of Meteorology (BoM) *Badgerys Creek* Weather Station must be used to determine the rain event.

L4 Noise limits

- L4.1 Noise from the mobile plant must not exceed an LA10 (15 minute) noise emission criterion of 35 dB(A) at all times.

except as expressly provided by this licence.

- L4.2 Noise from the premises must not exceed an LA10 (15 minute) noise emission criterion of 35 dB(A) at all times.

except as expressly provided by this licence.

- L4.3 Noise from the premises is to be measured or computed at any point within 30 metres of the most affected residence to determine compliance with condition L4.1 and L4.2 5dB(A) must be added if the noise is tonal or impulsive in character

4 Operating Conditions

O1 Activities must be carried out in a competent manner

- O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

- O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

O3 Dust

- O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.

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5 Monitoring and Recording Conditions

M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
- in a legible form, or in a form that can readily be reduced to a legible form;
 - kept for at least 4 years after the monitoring or event to which they relate took place; and
 - produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
- the date(s) on which the sample was taken;
 - the time(s) at which the sample was collected;
 - the point at which the sample was taken; and
 - the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

- M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

M2.2 Air Monitoring Requirements

POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Hydrogen fluoride	milligrams per cubic metre	Yearly	TM-9
Nitrogen Oxides	milligrams per cubic metre	Yearly	TM-11
Total Solid Particles	milligrams per cubic metre	Yearly	TM-15

M2.3 Water and/ or Land Monitoring Requirements

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
-----------	------------------	-----------	-----------------

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Oil and Grease	milligrams per litre	Weekly during any discharge	Grab sample
pH	pH	Weekly during any discharge	Grab sample
Turbidity	nephelometric turbidity units	Weekly during any discharge	Grab sample

POINT 5

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	<24hrs prior to discharge	Grab sample
Oil and Grease	milligrams per litre	<24hrs prior to discharge	Grab sample
pH	pH	<24hrs prior to discharge	Grab sample
Turbidity	nephelometric turbidity units	<24hrs prior to discharge	Grab sample

M3 Testing methods - concentration limits

M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:

- any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
- if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
- if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

M4 Testing methods - load limits

Note: Division 3 of the *Protection of the Environment Operations (General) Regulation 2009* requires that monitoring of actual loads of assessable pollutants listed in L2.2 must be carried out in accordance with the relevant load calculation protocol set out for the fee-based activity classification listed in the

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Administrative Conditions of this licence.

M5 Recording of pollution complaints

- M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.
- M5.2 The record must include details of the following:
- a) the date and time of the complaint;
 - b) the method by which the complaint was made;
 - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - d) the nature of the complaint;
 - e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
 - f) if no action was taken by the licensee, the reasons why no action was taken.
- M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M6 Telephone complaints line

- M6.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M6.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M6.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

6 Reporting Conditions

R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
- 1. a Statement of Compliance,
 - 2. a Monitoring and Complaints Summary,
 - 3. a Statement of Compliance - Licence Conditions,
 - 4. a Statement of Compliance - Load based Fee,
 - 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
 - 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and

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7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee:

- a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
- b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:

- a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
- b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

R1.6 Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date. The notification must specify:

- a) the assessable pollutants for which the actual load could not be calculated; and
- b) the relevant circumstances that were beyond the control of the licensee.

R1.7 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

R1.8 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- a) the licence holder; or
- b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

R2 Notification of environmental harm

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R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

- a) where this licence applies to premises, an event has occurred at the premises; or
 - b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,
- 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 to which the licence applies), the authorised officer may request a written report of the event.

R3.2 The licensee must 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.

R3.3 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
- g) any other relevant matters.

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

7 General Conditions

G1 Copy of licence kept at the premises or plant

G1.1 A copy of this licence must be kept at the premises to which the licence applies.

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G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.

G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

G2 Other general conditions

G2.1 Completed Programs

Program	Description	Completed Date
PRP 1 - WATER MONITORING PROGRAM	Water monitoring program for conductivity in discharges into Thompsons Creek from Licensed Discharge Point 4.	30-May-2014
PRP 2 - WATER MANAGEMENT PLAN	Protect and reduce the impact on Thompsons Creek by preparing a Water Management Plan (WMP) which outlines options to improve on site water management and reduce pollutant loads discharged from the site to Thompsons Creek.	13-November-2015

8 Special Conditions

E1 Summary Table of Special Conditions Completed

E1.1

No.	Special Condition	Description	Completed Date
1	Water Quality	To submit a report confirming details of all surface water; process water and effluent management systems; all existing sedimentation controls; modifications required; and timetable for implementation.	1 Nov 2002
2	Surface water management options	To submit a report on the best utilisation of water from dams 5 & 6.	1 Mar 2005

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Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

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flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .

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TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste

Ms Nadia Kanhoush

Environment Protection Authority

(By Delegation)

Date of this edition: 10-August-2000

Environment Protection Licence

Licence - 1808

End Notes

- 1 Licence varied by Change of contact details, issued on 20-Nov-2001, which came into effect on 20-Nov-2001.
- 2 Licence varied by notice 1016336, issued on 27-Jun-2002, which came into effect on 22-Jul-2002.
- 3 Licence varied by notice 1040220, issued on 23-Sep-2004, which came into effect on 18-Oct-2004.
- 4 Licence varied by notice 1043879, issued on 21-Jan-2005, which came into effect on 15-Feb-2005.
- 5 Licence varied by notice 1051526, issued on 05-Sep-2005, which came into effect on 30-Sep-2005.
- 6 Licence varied by notice 1062983, issued on 28-Aug-2006, which came into effect on 28-Aug-2006.
- 7 Licence varied by change to legislation, issued on 06-Jul-2007, which came into effect on 06-Jul-2007.
- 8 Licence varied by notice 1076143, issued on 19-Sep-2007, which came into effect on 19-Sep-2007.
- 9 Licence varied by notice 1079902, issued on 15-Nov-2007, which came into effect on 15-Nov-2007.
- 10 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 11 Licence varied by change to FBA for summer pollutants, issued on 16-Jan-2009, which came into effect on 16-Jan-2009.
- 12 Licence varied by notice 1503297 issued on 23-Jan-2012
- 13 Licence varied by notice 1510257 issued on 06-Feb-2013
- 14 Licence varied by notice 1520429 issued on 20-May-2014
- 15 Licence varied by notice 1524516 issued on 28-Aug-2014
- 16 Licence transferred through application 1530191 approved on 04-May-2015 , which came into effect on 04-May-2015
- 17 Licence format updated on 04-May-2015
- 18 Licence format updated on 05-May-2015
- 19 Licence varied by notice 1536325 issued on 04-Mar-2016
- 20 Licence varied by notice 1597020 issued on 11-Aug-2020

Appendix F

Bore Licence



**Department of
Primary Industries
Water**

Boral CSR Bricks Pty Limited
c/- VGT Environmental Compliance Solutions
PO Box 2335
GREENHILLS NSW 2323
Attention: Tara O'Brien

Contact Monique Brooking
Phone 02 4224 9738
Fax 02 4224 9740
Email Monique.Brooking@dpi.nsw.gov.au

Our ref 10BL605770

Dear Ms O'Brien

Monitoring Bore Licence
Lot 100 DP 1203966, Boral Bringelly Brickworks, 60 Greendale Road,
Bringelly 2556

Please find enclosed your bore licence. You should familiarise yourself with the description of the work and the terms, limitations and conditions under which the licence is issued.

Yours sincerely

Monique Brooking
Water Regulation Cadet
28 January, 2016

NSW Office of Water

Sydney South Coast Region
Locked Bag 5123
Level 11, 10 Valentine Avenue
Parramatta NSW 2124
Phone: (18) 00353104

BORE LICENSE CERTIFICATE UNDER SECTION 115 OF THE WATER ACT, 1912

10BL605770



Boral C S R Bricks Pty Limited
P O Box 2335
Greenhills NSW 2323

LICENSE NUMBER
10BL605770
DATE LICENSE VALID FROM
28-Jan-2016
DATE LICENSE VALID TO
PERPETUITY
FEE
\$0.00

ABN 72189919072 GST NIL

LOCATION OF WORKS

Portion(s) or Lot/Section/DP
100//1203966

PARISH
Cook

COUNTY
Cumberland

TYPE OF WORKS
Bore

PURPOSE(S) FOR WHICH WATER MAY BE USED
Monitoring Bore

CONDITIONS APPLYING TO THIS LICENSE ARE

As shown on the attached Condition Statement

ORIGINAL

NSW Office of Water

**CONDITIONS STATEMENT REFERRED TO ON
10BL605770
ISSUED UNDER PART V OF THE WATER ACT, 1912
ON 28-Jan-2016**

- (1) THE LICENCE SHALL LAPSE IF THE WORK IS NOT COMMENCED AND COMPLETED WITHIN THREE YEARS OF THE DATE OF THE ISSUE OF THE LICENCE.
- (2) THE LICENSEE SHALL WITHIN TWO MONTHS OF COMPLETION OR AFTER THE ISSUE OF THE LICENSE IF THE WORK IS EXISTING, FURNISH TO NSW OFFICE OF WATER:-
- (A) DETAILS OF THE WORK SET OUT IN THE ATTACHED FORM "A" (MUST BE COMPLETED BY A DRILLER).
- (B) A PLAN SHOWING ACCURATELY THE LOCATION OF THE WORK, IN RELATION TO PORTION AND PROPERTY BOUNDARIES.
- (C) A ONE LITRE WATER SAMPLE FOR ALL LICENCES OTHER THAN THOSE FOR STOCK, DOMESTIC, TEST BORES AND FARMING PURPOSES.
- (D) DETAILS OF ANY WATER ANALYSIS AND/OR PUMPING TESTS.
- (3) THE LICENSEE SHALL ALLOW NSW OFFICE OF WATER OR ANY PERSON AUTHORISED BY IT, FULL AND FREE ACCESS TO THE WORKS, EITHER DURING OR AFTER CONSTRUCTION, FOR THE PURPOSE OF CARRYING OUT INSPECTION OR TEST OF THE WORKS AND ITS FITTINGS AND SHALL CARRY OUT ANY WORK OR ALTERATIONS DEEMED NECESSARY BY THE DEPARTMENT FOR THE PROTECTION AND PROPER MAINTENANCE OF THE WORKS, OR THE CONTROL OF THE WATER EXTRACTED AND FOR THE PROTECTION OF THE QUALITY AND THE PREVENTION FROM POLLUTION OR CONTAMINATION OF SUB-SURFACE WATER.
- (4) IF DURING THE CONSTRUCTION OF THE WORK, SALINE OR POLLUTED WATER IS ENCOUNTERED ABOVE THE PRODUCING AQUIFER, SUCH WATER SHALL BE SEALED OFF BY:-
- (A) INSERTING THE APPROPRIATE LENGTH(S) OF CASING TO A DEPTH SUFFICIENT TO EXCLUDE THE SALINE OR POLLUTED WATER FROM THE WORK.
- (B) CEMENTING BETWEEN THE CASING(S) AND THE WALLS OF THE BORE HOLE FROM THE BOTTOM OF THE CASING TO GROUND LEVEL.
- ANY DEPARTURE FROM THESE PROCEDURES MUST BE APPROVED BY THE DEPARTMENT BEFORE UNDERTAKING THE WORK.
- (5) (A) THE LICENSEE SHALL NOTIFY NSW OFFICE OF WATER IF A FLOWING SUPPLY OF WATER IS OBTAINED. THE BORE SHALL THEN BE LINED WITH CASING AND CEMENTED AND A SUITABLE CLOSING GEAR SHALL BE ATTACHED TO THE BOREHEAD AS SPECIFIED BY NSW OFFICE OF WATER.
- (B) IF A FLOWING SUPPLY OF WATER IS OBTAINED FROM THE WORK, THE LICENSEE SHALL ONLY DISTRIBUTE WATER FROM THE BORE HEAD BY A SYSTEM OF PIPE LINES AND SHALL NOT DISTRIBUTE IT IN DRAINS, NATURAL OR ARTIFICIAL CHANNELS OR DEPRESSIONS.
- (6) IF A WORK IS ABANDONED AT ANY TIME THE LICENSEE SHALL NOTIFY NSW OFFICE OF WATER THAT THE WORK HAS BEEN ABANDONED AND SEAL OFF THE AQUIFER BY:-
- (A) BACKFILLING THE WORK TO GROUND LEVEL WITH CLAY OR CEMENT AFTER WITHDRAWING THE CASING (LINING); OR
- (B) SUCH METHODS AS AGREED TO OR DIRECTED BY NSW OFFICE OF WATER.

(7) THE LICENSEE SHALL NOT ALLOW ANY TAILWATER/DRAINAGE TO DISCHARGE INTO OR ONTO:-

- ANY ADJOINING PUBLIC OR CROWN ROAD;
- ANY OTHER PERSONS LAND;
- ANY CROWN LAND;
- ANY RIVER, CREEK OR WATERCOURSE;
- ANY NATIVE VEGETATION AS DESCRIBED UNDER THE NATIVE VEGETATION CONSERVATION ACT 1997;
- ANY WETLANDS OF ENVIRONMENTAL SIGNIFICANCE.

(8) WORKS USED FOR THE PURPOSE OF CONVEYING, DISTRIBUTING OR STORING WATER TAKEN BY MEANS OF THE LICENSED WORK SHALL NOT BE CONSTRUCTED OR INSTALLED SO AS TO OBSTRUCT THE REASONABLE PASSAGE OF FLOOD WATERS FLOWING INTO OR FROM A RIVER.

(9) IF THE BORE AUTHORISED BY THIS LICENSE IS LINED WITH STEEL OR PLASTIC CASING THE INSIDE DIAMETER OF THAT CASING SHALL NOT EXCEED 220 MM.

(10) WATER SHALL NOT BE PUMPED FROM THE BORE AUTHORISED BY THIS LICENSE FOR ANY PURPOSE OTHER THAN GROUNDWATER INVESTIGATION.

(11) SUBJECT TO CONDITION (12) THE LICENSEE SHALL WITHIN TWO MONTHS OF THE DATE OF COMPLETION OF THE BORE AUTHORISED BY THE LICENSE,

(1) BACKFILL IT WITH CLAY OR CEMENT TO GROUND LEVEL, AFTER WITHDRAWING ANY CASING(LINING), OR:-

(2) RENDER IT INEFFECTIVE BY ANY OTHER MEANS ACCEPTABLE TO THE DEPARTMENT.

(12) CONDITION (11) SHALL HAVE NO FORCE OR EFFECT IF:-

(1) AT THE RELEVANT TIME THERE IS WITH NSW OFFICE OF WATER, AN APPLICATION IN RESPECT OF WHICH THE DEPARTMENT HAS NOT MADE A DECISION TO CONVERT THE GROUNDWATER INVESTIGATION BORE INTO A PRODUCTION BORE; OR

(2) THE LICENSEE HAS COMPLETED THE BORE FOR THE PURPOSE OF MEASURING WATER LEVELS OR WATER QUALITY BY THE ADDITION OF CASING WITH A DIAMETER NOT EXCEEDING 220MM.

End Of Conditions

Appendix G

Surface Water Licence

Information about a water licence or approval

Use this tool to search for information about water licences and approvals issued under the *Water Act 1912* or *Water Management Act 2000*.

Select the type of licence or approval and enter the licence or approval number:

- **Water access licence (WAL):** a WAL number starts with the letters 'WAL' followed by several numbers; a WAL also has a reference number that starts with a two digit number, followed by 'AL' and then several numbers.
- **1912 water licence:** a water licence number starts with a two digit number, followed by a two letter code and then several numbers. Note: a PT reference number cannot be entered.
- **Approval:** an approval number starts with a two digit number, followed by a two letter code (WA, UA, CA or FW) and then several numbers.

Search for information about either a:

- ☐ Water access licence (WAL) issued under the *Water Management Act 2000*
- ☐ *Water Act 1912* Licences and Authorities

☒ **Approval issued under the *Water Management Act 2000***

Approval Number 10 ▼ CA ▼ 104630

Notes: The search results will list the conditions imposed on the approval and also list the number/s of any water access licence/s that nominate the water supply works associated with the approval.

This search tool does not include information about [controlled activity approvals](#). Information publicly available from a register of controlled activity approvals is available at our [local offices](#).

Find out if a *Water Act 1912* licence has been converted

- ☐ Water licence conversion status

<< Previous

Search

Print

Export

Search Results

Kind of Approval	Issue Date	Expiry Date	Approval Number	Status	Water Source
Water Supply Works And Water Use	01-JUL-2011	18-JUN-2025	10CA104630	Current	Hawkesbury And Lower Nepean Rivers Water Source

Work Type	Description	Diameter	Status	No of Works	Location (Lot/DP)
Diversion Works - Pumps	100mm Centrifugal Pump	NA	Active	1	Lot 100, DP 1203966
		NA	Active		Lot 100, DP 1203966
Storages	Bywash Dam	NA	Active	1	Lot 100, DP 1203966

Use Purpose(s)	Location(s)

Irrigation	Lot 100, DP 1203966
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Water Access Licences nominating these works

Reference Number	WAL Number
10AL104628	26257
10AL104629	25987

- Conditions

Plan Conditions

Water sharing plan	Greater Metropolitan Region Unregulated River Water Sources
--------------------	---

Take of water

MW0655-00001	Any water supply work authorised by this approval must take water in compliance with the conditions of the access licence under which water is being taken.
MW0911-00001	<p>Before water is taken through the water supply work authorised by this approval, visible flow in the water source at the location at which water is proposed to be taken must be confirmed.</p> <p>If a logbook is required to be kept:</p> <p>A. confirmation that water may be taken, and</p> <p>B. the method of confirmation, such as visual inspection, internet search</p> <p>must be recorded in the logbook.</p>

Monitoring and recording

MW2338-00001	The completed logbook must be retained for five (5) years from the last date recorded in the logbook.
MW2336-00001	The purpose or purposes for which water is taken, as well as details of the type of crop, area cropped, and dates of planting and harvesting, must be recorded in the logbook each time water is taken.
MW2337-00001	<p>The following information must be recorded in the logbook for each period of time that water is taken:</p> <p>A. date, volume of water, start and end time when water was taken as well as the pump capacity per unit of time, and</p> <p>B. the access licence number under which the water is taken, and</p> <p>C. the approval number under which the water is taken, and</p> <p>D. the volume of water taken for domestic consumption and/or stock watering.</p>
MW2339-00001	A logbook must be kept, unless the work is metered and fitted with a data logger. The logbook must be produced for inspection when requested by the relevant licensor.
MW0482-00001	Where a water meter is installed on a water supply work authorised by this approval, the meter reading must be recorded in the logbook before taking water. This reading must be recorded every time water is to be taken.

Reporting

MW0051-00001	<p>Once the approval holder becomes aware of a breach of any condition on this approval, the approval holder must notify the Minister as soon as practicable. The Minister must be notified by:</p> <p>A. email: water.enquiries@dpi.nsw.gov.au, or</p> <p>B. telephone: 1800 353 104. Any notification by telephone must also be confirmed in writing within seven (7) business days of the telephone call.</p>
MW3860-	A. When a water supply work authorised by this approval is no longer to be used permanently,

- 00001 the approval holder must:
- i. notify the relevant licensor in writing of the intention to decommission the work at least 90 days before the start of decommissioning, and
 - ii. decommission the work, unless the approval holder receives notice in writing from the Minister within 60 days of notifying DPI Water requiring that the work is not to be decommissioned or be decommissioned in accordance with specific requirements.
- B. Within 60 days of the work being decommissioned, the approval holder must notify the relevant licensor in writing that the work has been decommissioned.

Other Conditions

	Water management works
DK0888-00001	Any water supply work authorised by this approval used for the purpose of conveying, diverting or storing water must be constructed or installed to allow free passage of floodwaters flowing into or from a river or lake.
DK0871-00001	The water supply work authorised by this approval must be constructed and maintained in a way that will: <ol style="list-style-type: none"> A. ensure the work's safe construction and operation, and B. prevent the possibility of damage being caused by the work, or resulting from the work, to any public or private interest.
DK0878-00001	<ol style="list-style-type: none"> A. The construction, installation or use of the water supply work authorised by this approval must not cause or increase erosion to the channel or bank of the watercourse. B. If erosion is observed, the area must be stabilised with grass cover, stone pitching or any other material that will prevent any further occurrence of erosion.
DK0233-00078	The level of the crest of the bywash of the dam must be fixed at not higher than 1.99 m below the level of a benchmark established on a box tree on the right bank of the watercourse near the work and particulars of which are retained in the office of the relevant licensor.
DK1217-00001	The location of the dam(s) as shown on a plan retained in the office of the relevant licensor shall not be altered.
DS2349-00001	<p>The approval holder must make all reasonable efforts not to allow any used water to discharge, by any means including surface or subsurface drains or pipes, into or onto:</p> <ul style="list-style-type: none"> - any adjoining public or crown road; - any other person's land; - any Crown land; - any river, creek or watercourse or aquifer.

Disclaimer: WaterNSW is making the information available on the understanding that it does not warrant that the information is suitable for any intended use. In using the information supplied, the user acknowledges that they are responsible for any deductions or conclusions arrived at from interpretation of the data.

Privacy: The information provided is limited to meet the requirements of section 57 of the *Privacy and Personal Information Act 1998*.

Exporting and printing: Search results show a maximum of 50 rows per page. Search results can only be printed page by page.

More information: Should you require further information or technical assistance, please submit your request to water.enquiries@waternsw.com.au or contact 1300 662 077

Information about a water licence or approval

Use this tool to search for information about water licences and approvals issued under the *Water Act 1912* or *Water Management Act 2000*.

Select the type of licence or approval and enter the licence or approval number:

- **Water access licence (WAL):** a WAL number starts with the letters 'WAL' followed by several numbers; a WAL also has a reference number that starts with a two digit number, followed by 'AL' and then several numbers.
- **1912 water licence:** a water licence number starts with a two digit number, followed by a two letter code and then several numbers. Note: a PT reference number cannot be entered.
- **Approval:** an approval number starts with a two digit number, followed by a two letter code (WA, UA, CA or FW) and then several numbers.

Search for information about either a:

- ☐ Water access licence (WAL) issued under the *Water Management Act 2000*
- ☐ *Water Act 1912* Licences and Authorities

☒ **Approval issued under the *Water Management Act 2000***

Approval Number 10 ▼ CA ▼ 104657

Notes: The search results will list the conditions imposed on the approval and also list the number/s of any water access licence/s that nominate the water supply works associated with the approval.

This search tool does not include information about [controlled activity approvals](#). Information publicly available from a register of controlled activity approvals is available at our [local offices](#).

Find out if a *Water Act 1912* licence has been converted

- ☐ Water licence conversion status

<< Previous

Search

Print

Export

Search Results

Kind of Approval	Issue Date	Expiry Date	Approval Number	Status	Water Source
Water Supply Works And Water Use	01-JUL-2011	20-APR-2026	10CA104657	Current	Hawkesbury And Lower Nepean Rivers Water Source

Work Type	Description	Diameter	Status	No of Works	Location (Lot/DP)
Diversion Works - Pumps	80mm Centrifugal Pump	NA	Active	1	Lot 101, DP 1203966

Use Purpose(s)	Location(s)
Irrigation	

Water Access Licences nominating these works**Reference Number****WAL Number**

10AL104656

26259

- Conditions**Plan Conditions****Water sharing plan****Greater Metropolitan Region Unregulated River Water Sources****Take of water**

MW0655-00001

Any water supply work authorised by this approval must take water in compliance with the conditions of the access licence under which water is being taken.

MW0911-00001

Before water is taken through the water supply work authorised by this approval, visible flow in the water source at the location at which water is proposed to be taken must be confirmed.

If a logbook is required to be kept:

A. confirmation that water may be taken, and

B. the method of confirmation, such as visual inspection, internet search

must be recorded in the logbook.

Water management works

MW2435-00001

Water must be taken through the approved metering equipment installed on the water supply work authorised by this approval.

Monitoring and recording

MW2338-00001

The completed logbook must be retained for five (5) years from the last date recorded in the logbook.

MW2336-00001

The purpose or purposes for which water is taken, as well as details of the type of crop, area cropped, and dates of planting and harvesting, must be recorded in the logbook each time water is taken.

MW2337-00001

The following information must be recorded in the logbook for each period of time that water is taken:

A. date, volume of water, start and end time when water was taken as well as the pump capacity per unit of time, and

B. the access licence number under which the water is taken, and

C. the approval number under which the water is taken, and

D. the volume of water taken for domestic consumption and/or stock watering.

MW2339-00001

A logbook must be kept, unless the work is metered and fitted with a data logger. The logbook must be produced for inspection when requested by the relevant licensor.

MW0482-00001

Where a water meter is installed on a water supply work authorised by this approval, the meter reading must be recorded in the logbook before taking water. This reading must be recorded every time water is to be taken.

Reporting

MW0051-00001

Once the approval holder becomes aware of a breach of any condition on this approval, the approval holder must notify the Minister as soon as practicable. The Minister must be notified by:

A. email: water.enquiries@dpi.nsw.gov.au,
or

B. telephone: 1800 353 104. Any notification by telephone must also be confirmed in writing within seven (7) business days of the telephone call.

MW3860-00001	<p>A. When a water supply work authorised by this approval is no longer to be used permanently, the approval holder must:</p> <ol style="list-style-type: none"> notify the relevant licensor in writing of the intention to decommission the work at least 90 days before the start of decommissioning, and decommission the work, unless the approval holder receives notice in writing from the Minister within 60 days of notifying DPI Water requiring that the work is not to be decommissioned or be decommissioned in accordance with specific requirements. <p>B. Within 60 days of the work being decommissioned, the approval holder must notify the relevant licensor in writing that the work has been decommissioned.</p>
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Other Conditions

	Water management works
DK0888-00001	Any water supply work authorised by this approval used for the purpose of conveying, diverting or storing water must be constructed or installed to allow free passage of floodwaters flowing into or from a river or lake.
DK0878-00001	<p>A. The construction, installation or use of the water supply work authorised by this approval must not cause or increase erosion to the channel or bank of the watercourse.</p> <p>B. If erosion is observed, the area must be stabilised with grass cover, stone pitching or any other material that will prevent any further occurrence of erosion.</p>
DS2349-00001	<p>The approval holder must make all reasonable efforts not to allow any used water to discharge, by any means including surface or subsurface drains or pipes, into or onto:</p> <ul style="list-style-type: none"> - any adjoining public or crown road; - any other person's land; - any Crown land; - any river, creek or watercourse or aquifer.

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Appendix H

Conditions

Compliance

Worksheet

Bringelly Brickworks Extension Project
Applicable Period: 1 July 2020 to 30 June 2021
SSD Conditions: SSD_5684 Mod 1

Compliant	
Non Compliant: High Risk	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Non Compliant: Medium Risk	Non-compliance with: • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences, but is likely to occur
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Not Triggered	A requirement has an activation or timing trigger that has not been met at the phase of the development when the compliance assessment is undertaken, therefore an assessment of compliance is not relevant.

Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments
2		ADMINISTRATIVE CONDITIONS						
2	1	OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT In addition to meeting the specific performance criteria established under this consent, the Applicant must implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.	At all times	Annual review of performance including management policies, strategys and plans	Annual Review	Compliant	The whole document	
2		TERMS OF CONSENT						
2	2	The Applicant must: (a) carry out the development generally in accordance with the EIS and SEE (Mod 1); and (b) the conditions of this consent.	At all times	Annual review of performance including management policies, strategys and plans	Annual Review, EMS, Management Plans, MOP and ARR.	Non- Compliant	The whole document	Transport Limits exceeded. PM10 limit exceeded.
2	3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.	At all times	Not applicable	Not applicable	Compliant	-	
2	4	The Applicant must comply with any reasonable requirement/s of the Secretary arising the Department's assessment of: (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent; (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; or (c) the implementation of any actions or measures contained in these documents.	At all times	Annual review of performance including management policies, strategys and plans	Annual Review	Compliant	-	All comments from DPIE have been addressed
2		LIMITS ON CONSENT						
2		Quarrying and Brick Making Operations						
2	5	The Applicant may carry out quarrying operations and brick making operations from the date of commencement of development under this consent until 1 March 2045. Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.	At all times	Not applicable	Not applicable	Compliant		Operations on the site are currently being undertaken.
2		Production Limits						
2	6	The Applicant must not: (a) extract more than 200,000 tonnes of clay/shale from the site in any calendar year; (b) produce more than 263,500 tonnes of bricks at the site in any calendar year; (c) carry out quarrying operations beyond 46 m AHD; and (d) receive more than 321,000 tonnes of raw materials required for brick making to the site in any calendar year	Calendar year	Review weighbridge records, sales records, mining records and survey data	Weighbridge records, sales records, mining records and survey data	Compliant		For the reporting period 1/7/2020 to 30/6/2021 there was nil tonnes mined. There was 147,334 tonnes of bricks produced. Survey data indicates there is no mining below 46m AHD. 161,230 tonnes of raw material was received on site.
2		Transportation Limits						
2	7	The Applicant must not: (a) transport more than 263,500 tonnes of bricks from the site in a calendar year; (b) receive more than 90 trucks to the site per day or more than 18 trucks per hour; and (c) dispatch more than 90 trucks from the site per day or more than 18 trucks per hour.	Calendar year	Review weighbridge records, sales records.	Weighbridge records, sales records.	Non- Compliant		There was 32,267 tonnes of bricks produced. Average daily trucks are 57 per day. The daily count was exceeded on the 10/11/2020 with 101 trucks recorded (64 due to finished goods and 37 due to raw materials). The daily count was also exceeded on the 16/11/2020 with 94 trucks recorded (71 due to finished goods and 23 due to raw materials). The next exceedance was recorded on the 17/11/2020 with 93 trucks (66 due to finished goods and 27 due to raw materials). This was due to a large relocation of inventory, exacerbated by truck scheduling and impacted by wet weather in preceding weeks. DPIE was notified on 27/11/2020 of exceedances and acknowledgment email from DPIE received dated 10/12/2020. (Element Audit 2021). DPIE issued a Warning Letter on the 14th January 2021. Manual hourly counts will be automatically quantified once the automatic weighbridge system is fully operational.
2		NOTIFICATION OF COMMENCEMENT						

Bringelly Brickworks Extension Project
Applicable Period: 1 July 2020 to 30 June 2021
SSD Conditions: SSD_5684 Mod 1

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Not Triggered	A requirement has an activation or timing trigger that has not been met at the phase of the development when the compliance assessment is undertaken, therefore an assessment of compliance is not relevant.

Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments
2	8	Prior to commencing development under this consent, the Applicant must notify the Department in writing of the date on which it will commence development permitted under this consent.	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Appendix B	Correspondence sent to DPIE (see Appendix D of AR). Date of commencement is 24/2/2020.
2		SURRENDER OF EXISTING DEVELOPMENT CONSENT						
2	9	Within 4 months of commencing development under this consent, the Applicant must surrender the development consent (DA 91/1194) for existing operations on the site in accordance with Section 104A of the EP&A Act. Following the commencement of development under this consent, the conditions of this consent (including any notes) shall prevail to the extent of any inconsistency with the conditions of the existing development consent (DA 91/1194).	Within 4 months of commencing development	Correspondence	Correspondence	Compliant	Appendix C	Correspondence dated 28/7/2020 sent to DPIE (see Appendix D of AR).
2		STRUCTURAL ADEQUACY						
2	10	The Applicant must ensure that any new buildings and structures, and any alterations, or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA. Notes: - Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works. - Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.	Prior to occupation	Review certificates of construction and occupation	Certificates of construction and occupation	Compliant		No construction or alterations have been undertaken.
2		DEMOLITION						
2	11	The Applicant must ensure that all demolition work on site is carried out in accordance with Australian Standard AS 2601-2001: The Demolition of Structures, or its latest version.	As required	Review of demolition documentation	Demolition documentation	Compliant		No demolition has been undertaken on the site.
2		PROTECTION OF PUBLIC INFRASTRUCTURE						
2	12	The Applicant must: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development. Note: This condition does not apply to any damage to roads caused as a result of general road usage.	As required	Not applicable	Not applicable	Compliant		Not required
		OPERATION OF PLANT AND EQUIPMENT						
2	13	The Applicant must ensure that all plant and equipment used on site or any monitoring equipment used off site for monitoring the performance of the development is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	As required	As per individual management plans and equipment maintenance records	As per individual management plans, calibration reports, equipment service records	Compliant		Plant and Equipment on-site is regularly serviced. Monitoring equipment off-site (noise) is maintained by contractors and calibration certificates are supplied with reports.
2		UPDATING AND STAGING STRATEGIES, PLANS OR PROGRAMS						
2	14	With the approval of the Secretary, the Applicant may submit any strategies, plans or programs required by this consent on a progressive basis. To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval. With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent. Notes: - While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times. - If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.	As required	Assess if any revision of strategies, plans or programs have been undertaken	Approval correspondence from the Secretary.	Compliant		At this time the majority of the approved plans are dated 2013 and the site must operate under these approved plans until updated ones are approved. Updated plans will be submitted to DPIE for approval prior to works commencing in the extension area.
2	15	Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant must implement the existing strategies, plans or programs for the site that have been approved under DA 91/1194.	Until Mod 1 has commenced	As per DA91/1194 strategies, plans or programs until updated plans are approved.	ARR	Compliant		See above.
2		IDENTIFICATION OF APPROVED LIMITS OF EXTRACTION						
2	16	Prior to undertaking quarrying operations in the extension area, the Applicant must: (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.	Prior to undertaking quarrying operations in the extension area	Survey	Survey plans with co-ordinates have been supplied to DPIE in the EMS submitted for approval 19/09/2017.	Compliant		Mine lease survey plan has been undertaken for the mine lease. The ML boundarys are pegged. The original DA extraction limits have been pegged. Prior to commencing in the extension area the limits of extraction will be pegged.

Bringelly Brickworks Extension Project
Applicable Period: 1 July 2020 to 30 June 2021
SSD Conditions: SSD_5684 Mod 1

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Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments																													
2	17	While quarrying operations are being carried out, the Applicant must ensure that these boundaries are clearly marked at all times to allow operating staff and inspecting officers to clearly identify the approved limits of extraction.	At all times	Visual observation	Photography and site inspection records	Compliant		Mine lease survey plan has been undertaken for the mine lease. The ML boundarys are pegged. The original DA extraction limits have been pegged. Prior to commencing in the extension area the limits of extraction will be pegged.																													
2		PRODUCTION DATA																																			
2	18	The Applicant must: (a) provide annual quarry production data to DRE using the standard form for that purpose; and (b) include a copy of this data in the Annual Review (see condition 4 of schedule 5).	By 31st October each year for year ending 30th of June.	Maintenance of mining records	Mining records and DRE standard form	Compliant	Appendix I	Production data included in this report and results submitted to DRE each year.																													
2		DEVELOPER CONTRIBUTIONS																																			
2	19	The Applicant must pay Camden Council road maintenance contributions of \$0.0811 for every tonne of material transported to and from the site, indexed to CPI. Each payment must be: (a) paid to Council at the end of each calendar year; and (b) based on weighbridge records of all supplementary brick making materials transported to the site and bricks and spoil transported from the site. Note: If the parties are not able to agree on any aspect of the maintenance contributions, either party may refer the matter to the Secretary for resolution.	by 31st December each year.	Council receipts	Council receipts	Compliant		Invoices from Camden Council received and paid.																													
3		ENVIRONMENTAL PERFORMANCE CONDITIONS																																			
3		Hours of Operation																																			
3	1	The Applicant must comply with the operating hours set out in Table 1.	Daily	Site inductions, employee hours	employee hours logged in kronus system	Compliant																															
		<table><tr><th colspan="2">Table 1: Operating Hours</th></tr><tr><th>Activity</th><th>Operating Hours</th></tr><tr><td>• Quarrying operations</td><td>6am to 6pm, Monday to Friday</td></tr><tr><td>• Deliveries</td><td>6am to 1pm, Saturday</td></tr><tr><td>• Dispatch of finished bricks</td><td>No activities on Sundays or Public Holidays</td></tr><tr><td>Brick making operations (except dispatch of finished bricks)</td><td>24 hours a day, 7 days a week</td></tr><tr><td>Construction activities</td><td>7am to 6pm, Monday to Friday 8am to 1pm, Saturday No construction to be undertaken on Sundays or Public Holidays</td></tr></table>	Table 1: Operating Hours		Activity	Operating Hours	• Quarrying operations	6am to 6pm, Monday to Friday	• Deliveries	6am to 1pm, Saturday	• Dispatch of finished bricks	No activities on Sundays or Public Holidays	Brick making operations (except dispatch of finished bricks)	24 hours a day, 7 days a week	Construction activities	7am to 6pm, Monday to Friday 8am to 1pm, Saturday No construction to be undertaken on Sundays or Public Holidays																					
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3		NOISE																																			
3		Noise Criteria																																			
3	2	The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land. Notes: - To locate the receivers referred to in Table 2 refer to Appendix 3. - After the first review on any EPL granted for this development under Section 78 of the POEO Act, nothing in this consent prevents the EPA from imposing stricter noise limits on the quarrying operations on site under the EPL. Appendix 5 sets out the metrological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria. However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner/s to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.	Quarterly for the first 2 years then reviewed	NSW Industrial Noise Policy	Noise monitoring results	Compliant	Section 8.6	Noise monitoring has been undertaken for the periods ending December 2020, March 2021 and June 2021. Site attributable contributions were estimated to satisfy the relevant noise criteria at all locations during the assessments.																													
		<table><tr><th colspan="5">Table 2: Noise criteria dB(A)</th></tr><tr><th rowspan="2">Activity</th><th rowspan="2">Receiver</th><th>Day/Evening/Shoulder</th><th colspan="2">Night</th></tr><tr><th>L_{Aeq}(15 min)</th><th>L_{Aeq}(15 min)</th><th>L_{A1}(max)</th></tr><tr><td rowspan="4">Brick making and quarrying</td><td>R1, R2</td><td>47</td><td colspan="2" rowspan="4">Not Applicable</td></tr><tr><td>R3, R4, R14</td><td>46</td></tr><tr><td>R15, R17</td><td>45</td></tr><tr><td>All other receivers</td><td>44</td></tr><tr><td>Brick making</td><td>All receivers</td><td>44</td><td>43</td><td>53</td></tr></table>	Table 2: Noise criteria dB(A)					Activity	Receiver	Day/Evening/Shoulder	Night		L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (max)	Brick making and quarrying	R1, R2	47	Not Applicable		R3, R4, R14	46	R15, R17	45	All other receivers	44	Brick making	All receivers	44	43	53						
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Brick making	All receivers	44	43	53																																	
3		Construction Noise																																			
3	3	The Applicant must manage noise generated during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road, in accordance with the guidelines specified in Table 2 of the Interim Construction Noise Guideline. Note: Management guidelines are applicable to receivers 3 and 4, shown in Appendix 3.	During Construction	Interim Construction Noise Guideline	Noise monitoring results	Not Triggered	Section 8.6	Noise monitoring to be undertaken prior to commencing works under this development.																													
3		Noise Bunds																																			
3	4	The Applicant must ensure that the noise bund adjacent to the northern boundary of the extraction area is constructed prior to the commencement of quarrying operations in the extension area.	Prior to undertaking quarrying operations in the extension area	NSW Road Noise Policy	Visual obervation and photographic evidence	Not Triggered	Section 8.6																														

Bringelly Brickworks Extension Project
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Compliant	
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Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments
3	4a	The Applicant must ensure that the noise bund adjacent to Greendale Road is constructed prior to the commencement of brick making operations.	Prior to commencement of brickmaking operations	NSW Road Noise Policy	Visual observation and photographic evidence	Not Triggered	Section 8.6	
3		Operating Conditions						
3	5	The Applicant must: (a) implement all reasonable and feasible mitigation measures to minimise construction, operational and road noise of the development;	At all times	Deploy Noise Management Plan. Scheduled equipment inspections	Annual review, equipment service records and noise monitoring results	Compliant	Section 8.6	
		(b) implement periods of respite during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road;	During Construction	Interim Construction Noise Guideline	Noise monitoring results.	Not Triggered	Section 8.6	Record construction and respite hours when commenced.
		(c) regularly assess noise monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the noise criteria in this consent;	Quarterly and as required	NSW Industrial Noise Policy	Noise monitoring results. Annual Review. Absence of complaints.	Compliant	Section 8.6	Noise monitoring undertaken (see 3.2 above)
		(d) maintain the effectiveness of noise suppression equipment on plant and equipment on site;	At all times	Deploy Noise Management Plan. Scheduled equipment inspections	Annual review, equipment service records and noise monitoring results. Absence of complaints.	Compliant	Section 8.6	
		(e) minimise the noise impacts of the development during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 5); and	During the applicable periods of meteorological conditions	NSW Industrial Noise Policy Meteorological monitoring	Noise monitoring results. Meteorological data. Absence of complaints.	Compliant	Section 8.6	No mining or construction undertaken during the reporting period. No complaints received.
		(f) carry out regular noise monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.	Quarterly	NSW Industrial Noise Policy	Noise monitoring results	Compliant	Section 8.6	Noise monitoring undertaken (see 3.2 above)
3		Noise Management Plan						
3	6	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the EPA;	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Section 8.6	Version 4 approved 12/12/19
		(b) be submitted to the Secretary for approval prior to the commencement of development under this consent, unless the Secretary agrees otherwise;	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Section 8.6	
		(c) describe the reasonable and feasible mitigation measures that would be implemented to ensure: - construction noise is minimised; - compliance with the relevant noise criteria and operating conditions in this consent; - best management practice is being employed; and - the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;	Prior to undertaking quarrying operations in the extension area	Not applicable	Noise Management Plan	Compliant	Section 8.6	
		(d) describe the proposed noise management system on site; and	Prior to undertaking quarrying operations in the extension area	Not applicable	Noise Management Plan	Compliant	Section 8.6	
		(e) include a quarterly (or as otherwise agreed with the Secretary) noise monitoring program that: - uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent; - evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents. The Applicant must implement the approved management plan as approved from time to time by the Secretary.	Prior to undertaking quarrying operations in the extension area	Not applicable	Noise Management Plan	Compliant	Section 8.6	
3		AIR QUALITY						
3		Air Quality Criteria						
3	7	The Applicant must implement all reasonable and feasible avoidance and mitigation measures so that particulate matter emissions generated by the development do not exceed the criteria in Tables 3 to 6 at any residence on privately-owned land.	At all times	EPA Approved methods for the Sampling and Analysis of Air Pollutants in NSW	Air quality monitoring results	Non-Compliant	Section 8.2	HVAS has been installed and monitoring commenced in February 2020. The PM10 results are included in the AR and are below the criteria for the annual average. The 24-

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Not Triggered	A requirement has an activation or timing trigger that has not been met at thephase of the development when the compliance assessment is undertaken,therefore an assessment of compliance is not relevant.

Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments																																											
		<p><i>Table 3: Long-Term Criteria for Particulate Matter</i></p> <table><tr><th>Pollutant</th><th>Averaging period</th><th>^d Criterion</th></tr><tr><td>Total suspended particulates (TSP)</td><td>Annual</td><td>^a 90 µg/m³</td></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>Annual</td><td>^a 30 µg/m³</td></tr></table> <p><i>Table 4: Short-Term Criteria for Particulate Matter</i></p> <table><tr><th>Pollutant</th><th>Averaging period</th><th>^d Criterion</th></tr><tr><td>Particulate matter < 10 µm (PM₁₀)</td><td>24 hour</td><td>^a 50 µg/m³</td></tr></table> <p><i>Table 5: Long-Term Criteria for Deposited Dust</i></p> <table><tr><th>Pollutant</th><th>Averaging Period</th><th>Maximum increase in deposited dust level</th><th>Maximum total deposited dust level</th></tr><tr><td>^c Deposited dust</td><td>Annual</td><td>^b 2 g/m²/month</td><td>^a 4 g/m²/month</td></tr></table> <p><i>Table 6: Long and Short-Term Stack Emissions</i></p> <table><tr><th>Pollutant</th><th>Averaging period</th><th>^d Criterion</th></tr><tr><td rowspan="4">Sulphur Dioxide</td><td>10-minute</td><td>712 µg/m³</td></tr><tr><td>1-Hour</td><td>570 µg/m³</td></tr><tr><td>24-Hour</td><td>228 µg/m³</td></tr><tr><td>Annual</td><td>60 µg/m³</td></tr><tr><td rowspan="2">Nitrogen Dioxide</td><td>1-Hour</td><td>246 µg/m³</td></tr><tr><td>Annual</td><td>62 µg/m³</td></tr><tr><td>Hydrogen Chloride</td><td>1 hour</td><td>0.14 mg/m³</td></tr></table> <p><i>Notes to Tables 3-6:</i></p> <ul style="list-style-type: none">^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).^c 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, illegal activities or any other activity agreed by the Secretary in consultation with EPA.	Pollutant	Averaging period	^d Criterion	Total suspended particulates (TSP)	Annual	^a 90 µg/m ³	Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³	Pollutant	Averaging period	^d Criterion	Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³	Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level	^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month	Pollutant	Averaging period	^d Criterion	Sulphur Dioxide	10-minute	712 µg/m ³	1-Hour	570 µg/m ³	24-Hour	228 µg/m ³	Annual	60 µg/m ³	Nitrogen Dioxide	1-Hour	246 µg/m ³	Annual	62 µg/m ³	Hydrogen Chloride	1 hour	0.14 mg/m ³						<p>below the criteria for the annual average. The 24 hour period limit was exceeded once on the 11/4/2021 due to high winds.</p> <p>The annual average for all dust gauges was below the criteria. Results for D2 increased from 2.2 g/m2/month to 5.7 g/m2/month between November 2020 and December 2021 and from 1.1 g/m2/month in February 2021 to 9.7 g/m2/month in March 2021, all of which exceeded the 2.0 g/m2/monthly increase limit. There was no mining during the reporting period. D2 sampling noted the presence of bird dropping and algae which may have contributed to the higher results.</p> <p>As the increase in dust levels were not due to the development on its own, the dust results are compliant.</p> <p>Stack testing results were within the EPL conditions.</p> <p>No monitoring of residences was undertaken however the stack emissions are below the input data which produced acceptable results in the EIS AusPlume modelling.</p>
Pollutant	Averaging period	^d Criterion																																																	
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Hydrogen Chloride	1 hour	0.14 mg/m ³																																																	
3		Operating Conditions																																																	
3	8	The Applicant must: (a) implement all reasonable and feasible measures to minimise the stack and dust emissions of the development; (b) minimise surface disturbance and maximise progressive rehabilitation; (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note (d) to Tables 3-6 above); and (d) monitor and report on compliance with the relevant air quality conditions in this consent; to the satisfaction of the Secretary.	At all times 																																																

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Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments
		(c) describe the measures that would be implemented to ensure: - compliance with the air quality criteria and operating conditions under this consent; - best practice management is being employed; and - the air quality impacts of the development are minimised during adverse meteorological conditions;	Prior to undertaking quarrying operations in the extension area	Not applicable	Air Quality Management Plan	Compliant	Section 8.2	
		(d) describe the air quality management system; and	Prior to undertaking quarrying operations in the extension area	Not applicable	Air Quality Management Plan	Compliant	Section 8.2	
		(e) include an air quality monitoring program that: - evaluates and reports on: -- the effectiveness of the air quality management system; and -- compliance with the air quality criteria and operating conditions; and - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.	Prior to undertaking quarrying operations in the extension area	Not applicable	Air Quality Management Plan	Compliant	Section 8.2	
		The Applicant must implement the approved management plan as approved from time to time by the Secretary.	Prior to undertaking quarrying operations in the extension area	Not applicable	Air Quality Management Plan	Compliant	Section 8.2	
3		METEOROLOGICAL MONITORING						
3	10	For the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that: (a) complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline; and (b) is capable of continuous measurement of stability class, in accordance with the NSW Industrial Noise Policy, or as otherwise approved by EPA.	Prior to undertaking quarrying operations in the extension area	EPA Approved methods for the Sampling and Analysis of Air Pollutants in NSW - USEPA (2000) EPA 454/R-99-005 NSW Industrial Noise Policy.	Meteorological monitoring results.	Compliant	Section 8.1	
3		TRANSPORT						
		Monitoring of Product Transport						
3	11	The Applicant must keep accurate records of the: (a) tonnage of bricks transported from the site (monthly and annually); (b) amount of raw material imported to the site (monthly and annually); and (c) tonnage of each type of raw materials imported to the site (monthly and annually); and provide the Secretary with a summary of this information upon request.	By 31st December each year.	Review of weighbridge records.	Weighbridge records	Compliant	Section 8.11	The weighbridge is operational and the system is currently being updated to automatically record the data. Records can be provided to the Department on request.
		Parking						
3	12	The Applicant must provide sufficient parking on-site for all development-related traffic, in accordance with Camden Council's parking codes, to the satisfaction of the Secretary.	Prior to undertaking quarrying operations in the extension area	Visual observation. Camden Council parking codes.	Photography and site inspection records	Compliant	Section 8.11	Adequate parking is provided for light vehicles in the carpark at the entrance to the site. Heavy vehicles have stopping areas at the front gate and other construction and extraction vehicles can be accommodated within the pit and adjacent areas.
3		Operating Conditions						
3	13	The Applicant must ensure that: (a) all development-related heavy vehicles enter and exit the site in a forward direction;	At all times	Transport Management Plan	Photography and weighbridge operator/staff observations	Compliant	Section 8.11	Pers comm staff indicate vehicles enter and exit in a forward direction. The traffic flow direction is signposted to assist.
		(b) all laden vehicles entering or exiting the site have their loads covered (with the exception of vehicles carrying bricks);	At all times	Transport Management Plan	Photography and weighbridge operator/staff observations	Compliant	Section 8.11	Pers Comm staff indicate all loads are covered exporting finished bricks.
		(c) all laden vehicles that have accessed the extraction and/or stockpile areas are cleaned of sand and other material that may fall on the road, before leaving the site;	At all times	Transport Management Plan	Photography and weighbridge operator/staff observations	Compliant	Section 8.11	Pers comm staff inspect vehicles prior to leaving the site and a pressurised washer is used to clean vehicles if required,.
		(d) all heavy vehicles exiting the site travel east of the site along Greendale Road to The Northern Road and/or Bringelly Road;	At all times	Transport Management Plan	Photography and weighbridge operator/staff observations	Compliant	Section 8.11	Pers comm staff indicate all heavy vehicles turn right onto Greendale road when exiting the site.
		(e) the dispatch of laden trucks is avoided during the peak drop-off and pick-up times at the Bringelly Public School to the greatest extent practicable, particularly prior to the upgrade of the Greendale Road/Bringelly Road intersection by RMS; and	At all times	Transport Management Plan	Photography and weighbridge operator/staff observations	Compliant	Section 8.11	

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Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments
		(f) no trucks queue at the entrance to the site before 6am.	At all times	Transport Management Plan	Photography and weighbridge operator/staff observations	Compliant	Section 8.11	Pers Comm staff indicates no trucks are permitted to queue at the entrance prior to 6am.
		Access Road Intersection Construction						
3	14	Within 12 months of commencing development under this consent, unless otherwise agreed with the Secretary, the Applicant must design and construct the new site access road intersection with Greendale Road in accordance with applicable AUSTROADS standards, to the satisfaction of Camden Council. The Applicant must notify the Secretary in writing within 30 days of obtaining Council approval. Within 7 days of completing construction and the new site access road being operational, the existing site access road must be permanently closed.	Within 12 month of commencing development	Visual observation	Correspondence	Not Triggered	-	The new access road intersection has not been constructed as the development has not commenced. Also, new intersection has prompted re-design by council
3		Transport Management Plan						
3	15	The Applicant must prepare a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with RMS, Camden Council, Liverpool City Council and Bringelly Public School, and be submitted to the Secretary for approval prior to the commencement of development under this consent, unless the Secretary agrees otherwise;	Prior to undertaking quarrying operations in the extension area	Not applicable	Transport Management Plan	Compliant	Section 8.11	Version 1 approved 12/12/19
		(b) describe the measures that would be implemented to ensure compliance with the transport operating conditions under this consent, including specific measures to avoid the arrival and dispatch of laden trucks from the site during the peak drop-off and pick-up times at the Bringelly Public School;	Prior to undertaking quarrying operations in the extension area	Not applicable	Transport Management Plan	Compliant	Section 8.11	
		(c) include a Code of Conduct for heavy vehicle drivers that addresses: - travelling speeds; - procedures to minimise noise including a regular Truck Noise Auditing Program; - procedures to minimise diesel exhaust emissions; - instructions to avoid grouping or convoying of trucks; - procedures to ensure that drivers adhere to the designated haulage routes and the haulage hours permitted under this consent; - instructions to drivers not to overtake each other on the haulage route, as far as practicable, and to maintain appropriate distances between vehicles; and - instruction to drivers to be properly safety conscious and to strictly obey all traffic regulations, particularly in relation to school zones along Greendale Road; and	Prior to undertaking quarrying operations in the extension area	Not applicable	Transport Management Plan	Compliant	Section 8.11	
		(d) describe the measures that would be put in place to ensure compliance with the drivers' Code of Conduct and include a program to monitor the effectiveness of the implementation of these measures.	Prior to undertaking quarrying operations in the extension area	Not applicable	Transport Management Plan	Compliant	Section 8.11	
		The Applicant must implement the approved management plan as approved from time to time by the Secretary.	Prior to undertaking quarrying operations in the extension area	Not applicable	Transport Management Plan	Compliant	Section 8.11	
3		SOIL AND WATER						
		Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater.	Prior to extraction or interception of groundwater	Review of water licences held	Surface Water Licences WAL26259 (150ML), WAL26257 (6.5ML) and WAL25987 (152.5ML) are current. Monitoring Bore licence 10BL605770 held in perpetuity. Monitoring Bore licence 10BL605629 held but bores are destroyed.	Compliant	Section 3.5	
		Water Supply						
3	16	The Applicant must ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply to the satisfaction of the Secretary.	At all times	Annual water balance review	Water Balance	Compliant	Section 8.5	Water balance in approved WMP
3		Water Discharges						

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Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments						
3	17	The Applicant must comply with the discharge limits in any EPL or with Section 120 of the POEO Act.	On discharge	EPL approved water sampling and analysis methods. Surface Water Management Plan.	EPL return. Annual Review. Annual Rehabilitation Report	Compliant	Section 8.3	No controlled discharge occurred during the reporting period. Overflow from Dam 5 occurred from the 21/3/2021 to 26/3/2021 due to heavy rain events i.e. >100mm.						
3		Water Management Plan												
3	18	The Applicant must prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared by suitably qualified person/s approved by the Secretary;	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Section 8.3	Version 3 approved 12/12/19						
		(b) be prepared in consultation with the EPA and DPI Water;	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Section 8.3							
		(c) be submitted to the Secretary for approval prior to the commencement of development under this consent, unless the Secretary agrees otherwise;	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Section 8.3							
		(d) include a Site Water Balance that: - includes details of: -- quantity of water required to support operations; -- sources and security of water supply; -- water use and management on site; -- reporting procedures; and -- measures to be implemented to minimise potable water use on site;	Prior to undertaking quarrying operations in the extension area	Not applicable	Not applicable	Compliant	Section 8.3							
		(e) include a Surface Water Management Plan, that includes: - baseline data on surface water flows and quality in the watercourses that could be affected by the development; - a description of the surface water management system on site, including: -- clean water diversions; -- erosion and sediment controls; -- the dirty water management system; and -- water storages (addressing maximum harvestable rights if applicable); - performance criteria, including trigger levels for investigating any potentially adverse surface water quality impacts; - a program to monitor and report on: -- any surface water discharges; --- the effectiveness of the water management system; and -- surface water flows and quality in local watercourses; - a plan to respond to any exceedances of the performance criteria.	Prior to undertaking quarrying operations in the extension area	Not applicable	Not applicable	Compliant	Section 8.3							
		(f) a Groundwater Management Plan, which includes: - baseline data on groundwater levels, yield and quality in surrounding aquifers; - groundwater assessment and performance criteria, including trigger levels for investigating potentially adverse groundwater impacts; - a program to monitor: -- groundwater inflows to the quarry pit; and -- impacts of the development on surrounding aquifers; - an analysis of the monitoring results to determine long-term water levels within the quarry void; and - a plan to respond to any exceedances of the performance criteria.	Prior to undertaking quarrying operations in the extension area	Not applicable	Not applicable	Compliant	Section 8.3							
		The Applicant must implement the approved management plan as approved from time to time by the Secretary.	Prior to undertaking quarrying operations in the extension area	Not applicable	Water Management Plan	Compliant	Section 8.3							
		BIODIVERSITY												
		Biodiversity Offset Strategy												
3	19	The Applicant must implement the Biodiversity Offset Strategy described in the EIS, as summarised in Table 7 and shown conceptually in Appendix 4, to the satisfaction of the Secretary.	On commencement	Visual observations	Photographic evidence Annual review Annual Rehabilitation Report	Not Triggered	Section 8.7	Extraction in the extension area has not commenced.						
		<div>Table 7: Summary of the Biodiversity Offsets</div> <table><tr><th>Area</th><th>Offset Criteria</th><th>Size (Ha)</th></tr><tr><td>On-site offset</td><td>Existing vegetation to be enhanced to establish an area of native woodland comprising species associated with Cumberland Plain Woodland.</td><td>1.93</td></tr></table>	Area	Offset Criteria	Size (Ha)	On-site offset	Existing vegetation to be enhanced to establish an area of native woodland comprising species associated with Cumberland Plain Woodland.	1.93						
Area	Offset Criteria	Size (Ha)												
On-site offset	Existing vegetation to be enhanced to establish an area of native woodland comprising species associated with Cumberland Plain Woodland.	1.93												

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3		Security of Offsets						
3	20	Within 2 years of notifying the Department of commencement of development (see condition 8 of Schedule 2), unless otherwise agreed with the Secretary, the Applicant must make suitable arrangements to provide appropriate long-term security for the offset area, to the satisfaction of the Secretary. Note: Mechanisms to provide appropriate long term security to the land within the Biodiversity Offset Strategy include a Biobanking Agreement, Voluntary Conservation Agreement or an alternative mechanism that provides for a similar conservation outcome. Any mechanism must remain in force in perpetuity.	Within 2 years of notifying the Department of commencement of development	Correspondence	Correspondence	Not Triggered	Section 8.7	
3		Biodiversity Management Plan						
3	21	The Applicant must prepare a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the OEH and Camden Council;	Prior to undertaking quarrying operations in the extension area	Not applicable	Biodiversity Management Plan	Not Triggered	Section 8.7	BMP was submitted to DPIE but has since been withdrawn for review and re-submission.
		(b) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;	Prior to undertaking quarrying operations in the extension area	Not applicable	Biodiversity Management Plan	Not Triggered	Section 8.7	
		(c) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;	Prior to undertaking quarrying operations in the extension area	Not applicable	Biodiversity Management Plan	Not Triggered	Section 8.7	
		(d) describe the short, medium, and long term measures that would be implemented to: ~ manage the remnant vegetation and habitat on the site and in the offset area and; ~ implement the biodiversity offset strategy, including detailed performance and completion criteria;	Prior to undertaking quarrying operations in the extension area	Not applicable	Biodiversity Management Plan	Not Triggered	Section 8.7	
		(e) include performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);	Prior to undertaking quarrying operations in the extension area	Not applicable	Biodiversity Management Plan	Not Triggered	Section 8.7	
		(f) include a description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for: ~ maximising the salvage of resources within the approved disturbance area - including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area; ~ minimising the impacts on fauna on site, including pre-clearance surveys and minimising the potential exposure to tailings; ~ controlling weeds and feral pests; ~ controlling erosion; ~ controlling access; and ~ bushfire management;	Prior to undertaking quarrying operations in the extension area	Not applicable	Biodiversity Management Plan	Not Triggered	Section 8.7	
		(g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and	Prior to undertaking quarrying operations in the extension area	Not applicable	Biodiversity Management Plan	Not Triggered	Section 8.7	
		(h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.	Prior to undertaking quarrying operations in the extension area	Not applicable	Biodiversity Management Plan	Not Triggered	Section 8.7	
		The Applicant must implement the approved management plan as approved from time to time by the Secretary.	Prior to undertaking quarrying operations in the extension area	Not applicable	Biodiversity Management Plan	Not Triggered	Section 8.7	
3		Conservation Bond						

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Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments																																										
3	22	<p>Within 6 months of the approval of the Biodiversity Management Plan, the Applicant must lodge a conservation bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.</p> <p>The sum of the bond must be determined by:</p> <p>a. calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and</p> <p>b. employing a suitably qualified quantity surveyor to verify the calculated costs,</p> <p>c. to the satisfaction of the Secretary.</p> <p>The calculation of the conservation bond must be submitted to the Department for approval at least 1 month prior to lodgement of the final bond.</p> <p>If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.</p> <p>If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.</p> <p>Notes:</p> <p>~ Alternative funding arrangements for long term management of the biodiversity offset strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to conservation reserve estate (or any other mechanism agreed with OEH) can be used to reduce the liability of the conservation bond.</p> <p>~ The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy or the completion of major milestones within the approved plan.</p>	Within 6 months of the approval of the Biodiversity Management Plan.	Correspondence	Correspondence	Not Triggered	Section 8.7	Conservation bond within 6 months of commencement.																																										
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3	24	The Applicant must rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible 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.	During rehabilitation	<table><tr><td>Visual observations.</td><td>Photographic evidence</td><td>Compliant</td><td></td><td>MOP amendment approved 25/11/19</td></tr><tr><td>Review of Rehabilitation Management Plan, Environmental Management Strategy, Final Land Use Options Plan.</td><td>Annual review</td><td></td><td></td><td></td></tr><tr><td>Review of Mine Operations Plan.</td><td>Annual Rehabilitation Report</td><td></td><td></td><td></td></tr></table>	Visual observations.	Photographic evidence	Compliant		MOP amendment approved 25/11/19	Review of Rehabilitation Management Plan, Environmental Management Strategy, Final Land Use Options Plan.	Annual review				Review of Mine Operations Plan.	Annual Rehabilitation Report																																		
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Bringelly Brickworks Extension Project
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		(c) provide details of the conceptual final landform and associated final land uses for the site;	within 2 years of the date of notifying the Department of commencement of development	Review of Final Land Use Options Plan	Final Land Use Options Plan	Not Triggered	Section 8.13	Due 2 years after consent commenced
		(d) ensure that the conceptual final land form is compatible with surrounding land uses, and is consistent with the rehabilitation objectives in Table 8 and the objectives of the Growth Centres SEPP for the South West Growth Centre;	within 2 years of the date of notifying the Department of commencement of development	Review of Final Land Use Options Plan	Final Land Use Options Plan	Not Triggered	Section 8.13	Due 2 years after consent commenced
		(e) inform the Rehabilitation Management Plan (prepared in accordance with condition 26 of this consent); and	within 2 years of the date of notifying the Department of commencement of development	Review of Rehabilitation Management Plan	Rehabilitation Management Plan	Not Triggered	Section 8.13	Due 2 years after consent commenced
		(f) be reviewed every 7 years to account for applicable land use priorities, and if necessary updated.	Every 7 years	Review of Final Land Use Options Plan	Final Land Use Options Plan	Not Triggered	Section 8.13	Due 2 years after consent commenced
3		Rehabilitation Management Plan						
3	26	The Applicant must prepare a Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with OEH, DRE, DPI Water and Camden Council;	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Appendix K	The approved RMP is the 2013 version until the updated RMP is approved. The site operates under this RMP. Updated RMP has been submitted for approval prior to commencing in the extension area. MOP approved 25/11/19 and serves as a rehabilitation plan for the DRE.
		(b) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Section 8.13	Updated RMP will be submitted for approval prior to commencing in the extension area.
		(c) provide details of the conceptual final landform and associated land uses for the site (which must be consistent with the Final Land Use Options Plan under condition 25 of this consent);	Prior to undertaking quarrying operations in the extension area	Review of Rehabilitation Management Plan	Rehabilitation Management Plan	Compliant	Section 8.13	Updated RMP will be submitted for approval prior to commencing in the extension area.
		(d) describe the short, medium and long term measures that would be implemented to: ~ manage remnant vegetation and habitat on site; and ~ ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;	Prior to undertaking quarrying operations in the extension area	Review of Rehabilitation Management Plan	Rehabilitation Management Plan	Compliant	Section 8.13	Updated RMP will be submitted for approval prior to commencing in the extension area.
		(e) include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, including triggers for any necessary remedial action;	Prior to undertaking quarrying operations in the extension area	Review of Rehabilitation Management Plan	Rehabilitation Management Plan	Compliant	Section 8.13	Updated RMP will be submitted for approval prior to commencing in the extension area.
		(f) include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; and	Prior to undertaking quarrying operations in the extension area	Review of Rehabilitation Management Plan	Rehabilitation Management Plan	Compliant	Section 8.13	Updated RMP will be submitted for approval prior to commencing in the extension area.
		(g) include details of who would be responsible for monitoring, reviewing, and implementing the plan.	Prior to undertaking quarrying operations in the extension area	Review of Rehabilitation Management Plan	Rehabilitation Management Plan	Compliant	Section 8.13	Updated RMP will be submitted for approval prior to commencing in the extension area.
		The Applicant must implement the approved management plan as approved from time to time by the Secretary. Note: The Rehabilitation Management Plan must be reviewed, and if necessary updated, following any update of the Final Land Use Options Plan.	Prior to undertaking quarrying operations in the extension area	Not applicable	Rehabilitation Management Plan	Compliant	Section 8.13	Updated RMP will be submitted for approval prior to commencing in the extension area.
		HERITAGE						
3		Heritage Management Plan						
3	27	The Applicant must prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must: a. be prepared in consultation with OEH;	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Section 8.8	Version 4 approved 12/12/19
		(a) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;	Prior to undertaking quarrying operations in	Correspondence	Correspondence	Compliant	Section 8.8	

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		b. describe the measures that would be implemented to: ~ manage identified heritage objects, previously unidentified heritage objects or the discovery of any human remains on site; ~ ensure ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal cultural heritage values on site; and ~ protect sites identified adjacent to the development.	Prior to undertaking quarrying operations in the extension area	Not applicable	Heritage Management Plan	Compliant	Section 8.8	
		The Applicant must implement the approved management plan as approved from time to time by the Secretary.	As required	Not applicable	Heritage Management Plan	Compliant	Section 8.8	
		VISUAL						
3	28	The Applicant must establish a vegetation screen on both noise bunds, as soon as practicable after construction of the bunds, to minimise visibility of site infrastructure from outside the development area. Following establishment, the Applicant must maintain the vegetation screen, to the satisfaction of the Secretary.	As soon as practicable after construction of the bunds	Visual observations	Photographic evidence Annual review Annual Rehabilitation Report	Not Triggered	Section 8.9	Bundwalls have not been constructed.
3	29	The Applicant must; a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development; and b) ensure that all external lighting associated with the development complies with Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting, or its latest version.	At all times	Visual observations	Photographic evidence. Annual Review. Absence of complaints.	Compliant	Section 8.9	The quarry does not utilise lighting and operates during daylight hours. The factory is lit for security purposes at night but is sufficient distance from residents for the impact to be minimal.
		BUSHFIRE MANAGEMENT						
3	30	The Applicant must: a) ensure that the development is suitably equipped to respond to any fires on site; and b) assist the Rural Fire Service, emergency services and National Parks and Wildlife Service as much as practicable if there is a fire in the surrounding area.	At all times	Site audit for suitable equipment	Annual Review	Compliant	Section 8.12	The site maintains appropriate fire fighting equipment for the brickplant and offices. Any bushfire in the vegetation around the mine is dealt with by the RFS. The site maintains a Site Emergency Response Procedure.
		WASTE						
3	31	Prior to importing onto the site any material that may be classified as a waste under the EPA Waste Classification Guidelines 2009 (or its latest version), the Applicant must obtain a 'resource recovery exemption' under the POEO Act and provide evidence of this exemption to the Department. Note: This condition does not apply to routine deliveries to the site.	Prior to importation of waste	Correspondence	Correspondence	Compliant	Section 8.10	No waste has been imported onto the site.
3	32	The Applicant must: a) manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Camden Council; and b) pump all sewage generated and stored on-site to a sewage treatment facility, unless otherwise agreed with the Secretary.	At all times	Review of EPL returns and site documents	EPL return.	Compliant	Section 8.10	There have been no EPL non-compliances related to the on-site sewerage treatment and disposal in the last 12 months.
3	33	The Applicant must: a) minimise the waste generated by the development;	At all times	Visual observations Review of waste management plans or policies or procedures	Visual observations Waste management plans or policies or procedures	Compliant	Section 8.10	The quarry generates minimal waste (overburden) which is reused in rehabilitation. Waste generated by the brickworks is stored in the appropriate containers and removed by licenced waste contractors. PGH reviews its purchasing and waste policies and procedures regularly to improve processes as required.
		b) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and	At all times	Visual observations Review of waste management plans or policies or procedures	Visual observations Waste management plans or policies or procedures	Compliant	Section 8.10	The quarry generates minimal waste (overburden) which is reused in rehabilitation. Waste generated by the brickworks is stored in the appropriate containers and removed by licenced waste contractors.
		c) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.	Annually	Visual observations Review of waste management plans or policies or procedures	Visual observations Waste management plans or policies or procedures Annual Review	Compliant	Section 8.10	This Annual Review is the first review of the waste management and minimisation. As the development has not commenced, no overburden has been generated in the extension area.
4		ADDITIONAL PROCEDURES						

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4		NOTIFICATION OF LANDOWNERS						
4	1	As soon as practicable after obtaining monitoring results showing an exceedance of any relevant criteria in schedule 3, the Applicant must notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria.	As soon as practicable after obtaining monitoring results that exceed criteria	Correspondence	Correspondence	Non- Compliant	Section 9	Depositional dust and stack emissions have been within the criteria over the last 12 months. HVAS was exceeded once for the 24-hour maximum but no landowners affected and no notifications required.
4		INDEPENDENT REVIEW						
4	2	If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land. If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant 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 development is complying with the relevant criteria in schedule 3; ~ if the development is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Secretary and landowner a copy of the independent review.	Within 2 months of the Secretary's decision	Independent Review	Independent Review	Not Triggered		The secretary has not requested an Independent Review to date.
5		ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING						
5		ENVIRONMENTAL MANAGEMENT						
5		Environmental Management Strategy						
5	1	If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must: (a) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant;	Within 6 months of the Secretary requiring preparation of the strategy	Correspondence	Correspondence	Compliant	Section 3.2.2	Version 4 approved 12/12/19
		(b) provide the strategic framework for environmental management of the development;	Within 6 months of the Secretary requiring preparation of the strategy	Not applicable	Environmental Management Strategy	Compliant		
		(c) identify the statutory approvals that apply to the development;	Within 6 months of the Secretary requiring preparation of the strategy	Not applicable	Environmental Management Strategy	Compliant		
		(d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;	Within 6 months of the Secretary requiring preparation of the strategy	Not applicable	Environmental Management Strategy	Compliant		
		(e) describe the procedures that would be implemented to: ~ keep the local community and relevant agencies informed about the operation and environmental performance of the development; ~ receive, handle, respond to, and record complaints; ~ resolve any disputes that may arise during the course of the development; ~ respond to any non-compliance; ~ respond to emergencies; and	Within 6 months of the Secretary requiring preparation of the strategy	Not applicable	Environmental Management Strategy	Compliant		
		(f) include: ~ copies of any strategies, plans and programs approved under the conditions of this consent; and ~ a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.	Within 6 months of the Secretary requiring preparation of the strategy	Not applicable	Environmental Management Strategy	Compliant		
		The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.	As required	Not applicable	Environmental Management Strategy	Compliant		
5		Adaptive Management						

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5	2	The Applicant must assess and manage development-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 consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity: (a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur; (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and (c) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.	When exceedance of criteria in Schedule 3 occurs.	Review of each monitoring data set.	Annual Review Reports of exceedances and any management plans developed as a result of the exceedances.	Compliant		Exceedances have been discussed in the Annual Review. DPIE has been informed in writing of the transport exceedances and were issued a warning letter. The PM10 exceedance occurred only once over the 24 hour period and returned to normal levels. There was no material harm as a result of the exceedance and DPIE has been notified through the AR.
5		Management Plan Requirements						
5	3	The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data; (b) a description of: ~ the relevant statutory requirements (including any relevant approval, licence or lease conditions); ~ any relevant limits or performance measures/criteria; and ~ the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; (d) a program to monitor and report on the: ~ impacts and environmental performance of the development; and ~ effectiveness of any management measures (see (c) above); (e) a contingency plan to manage any unpredicted impacts and their consequences; (f) a program to investigate and implement ways to improve the environmental performance of the development over time; (g) a protocol for managing and reporting any: ~ incidents; ~ complaints; ~ non-compliances with statutory requirements; and ~ exceedances of the impact assessment criteria and/or performance criteria; and (h) a protocol for periodic review of the plan. Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.	As required	Review of relevant Management Plans	Relevant Management Plans	Compliant		Plans approved 12/12/19. Approval for RMP approved 16/10/2013. The the BMP was submitted to DPIE but has been withdrawn and is currently under review.
		Annual Review						
5	4	By the end of September each year, the Applicant must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must: (a) describe the development (including rehabilitation) that was carried out in the previous financial year, and the development that is proposed to be carried out over the current financial year; (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, which includes a comparison of these results against: ~ the relevant statutory requirements, limits or performance measures/criteria; ~ the monitoring results of previous years; and ~ the relevant predictions in the documents in condition 2(a) of Schedule 2; (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; (d) identify any trends in the monitoring data over the life of the development; (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and (f) describe what measures will be implemented over the current financial year to improve the environmental performance of the development.	End of September each year.	Review of all data and plans for site for the financial year	Monitoring data and other relevant documents and photography	Compliant	The whole document	This report will be submitted prior to the end of September. 2020 Annual review (VGT) was acknowledged as received by the DPIE in email dated 30/11/2020 (EMM Audit 2021)
5		Revision of Strategies, Plans & Programs						

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Not Triggered	A requirement has an activation or timing trigger that has not been met at the phase of the development when the compliance assessment is undertaken, therefore an assessment of compliance is not relevant.

Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments
5	5	Within 3 months of the submission of an: (a) Annual Review under condition 4 above; (b) incident report under condition 7 below; (c) audit report under condition 9 below; and (d) any modifications to this consent, the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary. Note: 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 development.	Within 3 months of described conditions	Not applicable	Correspondence	Not triggered		No revisions of documents required to date.
5		Community Consultative Committee						
5	6	The Applicant must establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments (Department of Planning, 2007, or its latest version), and be operating prior to the commencement of development under this consent. Notes: ~ The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent. ~ In accordance with the guideline, the Committee should comprise an independent chair and appropriate representation from the Applicant, Camden Council and the local community.	Prior to undertaking quarrying operations in the extension area	Correspondence	Correspondence	Compliant	Section 9	The CCC has been established.
		REPORTING						
5		Incident Reporting						
5	7	The Applicant must immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant must provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Immediately notify after any incident and report within 7 days of incident	Not applicable	Correspondence	Non-Compliant		Truck number exceedance reported to DPIE in email dated 10/12/2020. DPIE issued a warning letter.
		Regular Reporting						
5	8	The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.	As required	Review of website	Website	Compliant		
5		INDEPENDENT ENVIRONMENTAL AUDIT						
5	9	Within a year of commencing development under this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must: (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies; (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licence (including any assessment, plan or program required under these approvals); (d) review the adequacy of any approved strategy, plan or program required under these approvals; (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals; and be conducted and reported to the satisfaction of the Secretary. Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.	Within a year of commencing development under this consent, and every 3 years thereafter,	Review of all data, documents, correspondence, reports and plans for site.	Audit report	Compliant		Independent Audit was undertaken by Element Environment Pty Ltd in January 2021. The next Audit will be due in 2024.
5	10	Within 12 weeks of commencing this audit, unless the Secretary agrees otherwise, the Applicant must submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented. Within 7 days of commencing the audit, the Applicant must notify the Department in writing of the commencement of the audit.	Audit report to be supplied to Secretary within 12 weeks of commencing audit. Notify the Department within 7 days of commencing the audit.	Correspondence	Correspondence	Compliant		See Appendix I
5		ACCESS TO INFORMATION						

Bringelly Brickworks Extension Project
Applicable Period: 1 July 2020 to 30 June 2021
SSD Conditions: SSD_5684 Mod 1

Compliant	
Non Compliant: High Risk	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Non Compliant: Medium Risk	Non-compliance with: • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences, but is likely to occur
Non Compliant: Low Risk	Non-compliance with: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur
Not Triggered	A requirement has an activation or timing trigger that has not been met at the phase of the development when the compliance assessment is undertaken, therefore an assessment of compliance is not relevant.

Schedule	Condition	Condition Text	Timing for Compliance	Monitoring Methodology	Evidence	Details of compliance status	Where addressed in Annual Review	Comments
5	11	Within 6 months of commencing development under this consent, the Applicant must: (a) make copies of the following publicly available on its website: ~ the documents in condition 2(a) of Schedule 2; ~ current statutory approvals for the development; ~ approved strategies, plans and programs required under the conditions of this consent; ~ a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; ~ a complaints register, which is to be updated monthly; ~ minutes of CCC meetings; ~ the annual reviews of the development (for the last 5 years); ~ any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit; ~ any other matter required by the Secretary; and (b) keep this information up-to-date, to the satisfaction of the Secretary.	Within 6 months of commencing development under this consent.	Review of website	Website	Compliant		The approved Plans and Strategies have been uploaded to the website.
Appendix 5		NOISE COMPLIANCE ASSESSMENT						
		Applicable Metrological Conditions						
	1	The noise criteria in Table 2 of the conditions are to apply under all meteorological conditions except the following: (a) wind speeds greater than 3 m/s at 10 m above ground level; or (b) temperature inversion conditions between 1.5 °C and 3°C/100 m and wind speeds greater than 2 m/s at 10 m above ground level; or (c) temperature inversion conditions greater than 3°C/100 m.	When meteorological conditions apply	NSW Industrial Noise Policy Meteorological monitoring	Noise monitoring results. Meteorological data	Compliant		A weather station has been installed in early 2017. Generally the site does not operate during inversion conditions as these are commonly experienced outside of operating hours. No complaints have been received during the report period.
		Determination of Meteorological Conditions						
	2	Except for wind speed at microphone height, the data to be used for determining meteorological conditions must be that recorded by the meteorological station on or in the vicinity of the site.	During meteorological monitoring	On-site meteorological station.	Meteorological data.	Compliant		A weather station has been installed in early 2017.
		Compliance Monitoring						
	3	Unless directed otherwise by the Secretary, quarterly attended monitoring is to be used to evaluate compliance with the relevant conditions of consent. Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.	Quarterly	NSW Industrial Noise Policy	Noise monitoring results.	Compliant		Current management measures have been satisfactory to date and no complaints have been received the the last 12 months.
	4	Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (as amended from time to time), in particular the requirements relating to: (a) monitoring locations for the collection of representative noise data; (b) meteorological conditions during which collection of noise data is not appropriate; (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and (d) modifications to noise data collected including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.	Quarterly	NSW Industrial Noise Policy	Noise monitoring results.	Compliant		Monitoring has been undertaken as required by conent conditions.

Bringelly Brickworks Extension Project

EPL1808

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments															
1	Administrative Conditions																		
A1.1	<p>What the licence authorises and regulates</p> <p>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.</p> <p>Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.</p> <table><thead><tr><th>Scheduled Activity</th><th>Fee Based Activity</th><th>Scale</th></tr></thead><tbody><tr><td>Ceramic Works produced</td><td>Ceramics production</td><td>> 50000 - 200000 T</td></tr><tr><td>Crushing, grinding or separating</td><td>Crushing, Grinding or Separating</td><td>> 100000 - 500000 T processed</td></tr><tr><td>Extractive Activities processed or stored</td><td>Land-based extractive activity</td><td>> 100000 - 500000 Textracted,</td></tr><tr><td>Mining for minerals</td><td>Mining for Minerals</td><td>> 100000 - 500000 T produced</td></tr></tbody></table>	Scheduled Activity	Fee Based Activity	Scale	Ceramic Works produced	Ceramics production	> 50000 - 200000 T	Crushing, grinding or separating	Crushing, Grinding or Separating	> 100000 - 500000 T processed	Extractive Activities processed or stored	Land-based extractive activity	> 100000 - 500000 Textracted,	Mining for minerals	Mining for Minerals	> 100000 - 500000 T produced	Compliant		The development has not commenced and there have been no changes to the scheduled activities.
Scheduled Activity	Fee Based Activity	Scale																	
Ceramic Works produced	Ceramics production	> 50000 - 200000 T																	
Crushing, grinding or separating	Crushing, Grinding or Separating	> 100000 - 500000 T processed																	
Extractive Activities processed or stored	Land-based extractive activity	> 100000 - 500000 Textracted,																	
Mining for minerals	Mining for Minerals	> 100000 - 500000 T produced																	
A2.1	<p>The licence applies to the following premises:</p> <p>Premises Details BRINGELLY LOT 2 GREENDALE ROAD BRINGELLY NSW 2556 LOT 11 DP 1125892</p>	Compliant																	
A3.1	<p>Information supplied to the EPA</p> <p>Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.</p> <p>In this condition the reference to "the licence application" includes a reference to:</p> <p>a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and</p> <p>b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.</p>	Compliant																	
2	Discharges to Air and Water and Applications to Land																		
P1.1	<p>Location of monitoring/discharge points and areas The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.</p> <table><thead><tr><th colspan="4">Air</th></tr><tr><th>EPA identi- fication no.</th><th>Type of Monitoring Point</th><th>Type of Discharge Point</th><th>Location Description</th></tr></thead><tbody><tr><td>2</td><td>Discharge to Air; Air Emissions Monitoring</td><td>Discharge to Air; Air Emissions Monitoring</td><td>Kiln exhaust stack as marked on map showing locations of discharge points submitted to the EPA with Licence Information Form dated 9/05/00.</td></tr></tbody></table>	Air				EPA identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description	2	Discharge to Air; Air Emissions Monitoring	Discharge to Air; Air Emissions Monitoring	Kiln exhaust stack as marked on map showing locations of discharge points submitted to the EPA with Licence Information Form dated 9/05/00.	Compliant					
Air																			
EPA identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description																
2	Discharge to Air; Air Emissions Monitoring	Discharge to Air; Air Emissions Monitoring	Kiln exhaust stack as marked on map showing locations of discharge points submitted to the EPA with Licence Information Form dated 9/05/00.																

Bringelly Brickworks Extension Project

EPL1808

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments																
P1.2	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.	Compliant																		
P1.3	<div>The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.</div> <div><table><tr><th colspan="4">Water and land</th></tr><tr><th>EPA Identification no.</th><th>Type of Monitoring Point</th><th>Type of Discharge Point</th><th>Location Description</th></tr><tr><td>1</td><td>Discharge and Monitoring; Discharge to waters</td><td>Discharge and Monitoring; Discharge to waters</td><td>Outlet from Dam 1 on map labelled: Site Layout Plan, Figure 2, Water Management Plan dated 10.11.15 (EPA DOC15/464889-02). Discharge point is located on the NE corner of Dam 1.</td></tr><tr><td>5</td><td>Discharge and Monitoring; Discharge to waters</td><td>Discharge and Monitoring; Discharge to waters</td><td>Discharge from Dam 5 on map labelled: Site Layout Plan, Figure 2, Water Management Plan dated 10.11.15 (EPA DOC15/464889-02). Discharge point is located on the NW corner of Dam 5.</td></tr></table></div>	Water and land				EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description	1	Discharge and Monitoring; Discharge to waters	Discharge and Monitoring; Discharge to waters	Outlet from Dam 1 on map labelled: Site Layout Plan, Figure 2, Water Management Plan dated 10.11.15 (EPA DOC15/464889-02). Discharge point is located on the NE corner of Dam 1.	5	Discharge and Monitoring; Discharge to waters	Discharge and Monitoring; Discharge to waters	Discharge from Dam 5 on map labelled: Site Layout Plan, Figure 2, Water Management Plan dated 10.11.15 (EPA DOC15/464889-02). Discharge point is located on the NW corner of Dam 5.	Compliant		
Water and land																				
EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description																	
1	Discharge and Monitoring; Discharge to waters	Discharge and Monitoring; Discharge to waters	Outlet from Dam 1 on map labelled: Site Layout Plan, Figure 2, Water Management Plan dated 10.11.15 (EPA DOC15/464889-02). Discharge point is located on the NE corner of Dam 1.																	
5	Discharge and Monitoring; Discharge to waters	Discharge and Monitoring; Discharge to waters	Discharge from Dam 5 on map labelled: Site Layout Plan, Figure 2, Water Management Plan dated 10.11.15 (EPA DOC15/464889-02). Discharge point is located on the NW corner of Dam 5.																	
3	Limit Conditions																			
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.	Compliant																		
L2.1	<div>Load limits</div> <div>The actual load of an assessable pollutant discharged from the premises during the reporting period must not exceed the load limit specified for the assessable pollutant in the table below.</div>	Compliant																		
L2.2	<div>The actual load of an assessable pollutant must be calculated in accordance with the relevant load calculation protocol.</div> <div><table><tr><th>Assessable Pollutant</th><th>Load limit (kg)</th></tr><tr><td>Coarse Particulates (Air)</td><td>8400.00</td></tr><tr><td>Fine Particulates (Air)</td><td>33300.00</td></tr><tr><td>Fluoride (Air)</td><td>11700.00</td></tr><tr><td>Nitrogen Oxides - Summer (Air)</td><td></td></tr><tr><td>Nitrogen Oxides (Air)</td><td>90300.00</td></tr><tr><td>Sulfur Oxides (Air)</td><td>186500.00</td></tr></table></div> <div>Note: An assessable pollutant is a pollutant which affects the licence fee payable for the licence.</div>	Assessable Pollutant	Load limit (kg)	Coarse Particulates (Air)	8400.00	Fine Particulates (Air)	33300.00	Fluoride (Air)	11700.00	Nitrogen Oxides - Summer (Air)		Nitrogen Oxides (Air)	90300.00	Sulfur Oxides (Air)	186500.00	Compliant				
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L3.1	<div>Concentration limits</div> <div>For each monitoring/discharge point or utilisation area specified in the table/s below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.</div>	Compliant																		
L3.2	Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.	Compliant																		

Bringelly Brickworks Extension Project

EPL1808

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments																																																						
L3.3	To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.	Compliant																																																								
L3.4	<div>Air Concentration Limits</div> <div>POINT 2</div> <table><tr><th>Pollutant</th><th>Units of measure</th><th>100 percentile concentration limit</th><th>Reference conditions</th><th>Oxygen correction</th><th>Averaging period</th></tr><tr><td>Total Solid Particles</td><td>milligrams per cubic metre</td><td>100</td><td></td><td></td><td></td></tr><tr><td>Hydrogen fluoride</td><td>milligrams per cubic metre</td><td>50</td><td></td><td></td><td></td></tr><tr><td>Nitrogen Oxides</td><td>milligrams per cubic metre</td><td>2000</td><td></td><td></td><td></td></tr></table>	Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period	Total Solid Particles	milligrams per cubic metre	100				Hydrogen fluoride	milligrams per cubic metre	50				Nitrogen Oxides	milligrams per cubic metre	2000				Compliant		The results over the last few years have been compliant.																														
Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period																																																					
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L3.5	<div>Water and/or Land Concentration Limits</div> <div>POINT 1</div> <table><tr><th>Pollutant</th><th>Units of Measure</th><th>50 percentile concentration limit</th><th>90 percentile concentration limit</th><th>3DGM concentration limit</th><th>100 percentile concentration limit</th></tr><tr><td>Oil and Grease</td><td>milligrams per litre</td><td></td><td></td><td></td><td>10</td></tr><tr><td>pH</td><td>pH</td><td></td><td></td><td></td><td>6.5-8.5</td></tr><tr><td>Turbidity</td><td>nephelometric turbidity units</td><td></td><td></td><td></td><td>150</td></tr></table> <div>POINT 5</div> <table><tr><th>Pollutant</th><th>Units of Measure</th><th>50 percentile concentration limit</th><th>90 percentile concentration limit</th><th>3DGM concentration limit</th><th>100 percentile concentration limit</th></tr><tr><td>Conductivity</td><td>microsiemens per centimetre</td><td></td><td></td><td></td><td>1450</td></tr><tr><td>Oil and Grease</td><td>milligrams per litre</td><td></td><td></td><td></td><td>10</td></tr><tr><td>pH</td><td>pH</td><td></td><td></td><td></td><td>6.5-8.5</td></tr><tr><td>Turbidity</td><td>nephelometric turbidity units</td><td></td><td></td><td></td><td>150</td></tr></table>	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit	Oil and Grease	milligrams per litre				10	pH	pH				6.5-8.5	Turbidity	nephelometric turbidity units				150	Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit	Conductivity	microsiemens per centimetre				1450	Oil and Grease	milligrams per litre				10	pH	pH				6.5-8.5	Turbidity	nephelometric turbidity units				150	Compliant		There has been no controlled discharge from the site during the reporting period.
Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit																																																					
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Turbidity	nephelometric turbidity units				150																																																					
L3.6	Exceedance of a quality limit specified in this Licence for the discharge of total suspended solids or turbidity from Point 1 or Point 5 is only permitted if the discharge from Point 1 or Point 5 occurs solely as a result of rainfall. The rainfall must be equal to, or greater than, a 90th percentile 5-day rain event.	Compliant		Overflow from Dam 5 occurred from the 21/3/2021 to 26/3/2021 due to heavy rain events i.e. >100mm.																																																						

Bringelly Brickworks Extension Project

EPL1808

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments
L3.7	For the purposes of Condition L3.6, a 90th percentile 5-day rain event equates to rainfall of 50 millimetres over a 5 day period.	Compliant		
L3.8	For the purposes of the condition(s) above, rainfall data recorded by the meteorological station identified as the Bureau of Meteorology (BoM) Badgerys Creek Weather Station must be used to determine the rain event.	Compliant		
L4.1	Noise from the mobile plant must not exceed an LA10 (15 minute) noise emission criterion of 35 dB(A) at all times. except as expressly provided by this licence.	Compliant		Noise monitoring is compliant There have been no noise complaints within the last 12 months.
L4.2	Noise from the premises must not exceed an LA10 (15 minute) noise emission criterion of 35 dB(A) at all times. except as expressly provided by this licence.	Compliant		Noise monitoring is compliant There have been no noise complaints within the last 12 months.
L4.3	Noise from the premises is to be measured or computed at any point within 30 metres of the most affected residence to determine compliance with condition L4.1 and L4.2. 5dB(A) must be added if the noise is tonal or impulsive in character.	Compliant		Noise monitoring is compliant There have been no noise complaints within the last 12 months.
4	Operating Conditions			
O1.1	Activities must be carried out in a competent manner Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	Compliant		
O2.1	Maintenance of plant and equipment All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.	Compliant		
O3.1	Dust The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	Compliant		
5	Monitoring and Recording Conditions			
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Compliant		Records are kept of all monitoring and reported in the EPL Annual Return, the ARR and this Annual Review.
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	Compliant		Records are kept of all monitoring and reported in the EPL Annual Return, the ARR and this Annual Review.

Bringelly Brickworks Extension Project

EPL1808

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments																																				
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Compliant		Contractors or PGH sampling staff maintain these records.																																				
M2.1	For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:	Compliant																																						
M2.2	Air Monitoring Requirements POINT 2 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Hydrogen fluoride</td><td>milligrams per cubic metre</td><td>Yearly</td><td>TM-9</td></tr><tr><td>Nitrogen Oxides</td><td>milligrams per cubic metre</td><td>Yearly</td><td>TM-11</td></tr><tr><td>Total Solid Particles</td><td>milligrams per cubic metre</td><td>Yearly</td><td>TM-15</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling Method	Hydrogen fluoride	milligrams per cubic metre	Yearly	TM-9	Nitrogen Oxides	milligrams per cubic metre	Yearly	TM-11	Total Solid Particles	milligrams per cubic metre	Yearly	TM-15	Compliant																						
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M2.3	Water and/ or Land Monitoring Requirements POINT 1 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Oil and Grease</td><td>milligrams per litre</td><td>Weekly during any discharge</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td>Weekly during any discharge</td><td>Grab sample</td></tr><tr><td>Turbidity</td><td>nephelometric turbidity units</td><td>Weekly during any discharge</td><td>Grab sample</td></tr></table> POINT 5 <table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Conductivity</td><td>microsiemens per centimetre</td><td><24hrs prior to discharge</td><td>Grab sample</td></tr><tr><td>Oil and Grease</td><td>milligrams per litre</td><td><24hrs prior to discharge</td><td>Grab sample</td></tr><tr><td>pH</td><td>pH</td><td><24hrs prior to discharge</td><td>Grab sample</td></tr><tr><td>Turbidity</td><td>nephelometric turbidity units</td><td><24hrs prior to discharge</td><td>Grab sample</td></tr></table>	Pollutant	Units of measure	Frequency	Sampling Method	Oil and Grease	milligrams per litre	Weekly during any discharge	Grab sample	pH	pH	Weekly during any discharge	Grab sample	Turbidity	nephelometric turbidity units	Weekly during any discharge	Grab sample	Pollutant	Units of measure	Frequency	Sampling Method	Conductivity	microsiemens per centimetre	<24hrs prior to discharge	Grab sample	Oil and Grease	milligrams per litre	<24hrs prior to discharge	Grab sample	pH	pH	<24hrs prior to discharge	Grab sample	Turbidity	nephelometric turbidity units	<24hrs prior to discharge	Grab sample	Compliant		There has been no controlled discharge from the site during the reporting period.
Pollutant	Units of measure	Frequency	Sampling Method																																					
Oil and Grease	milligrams per litre	Weekly during any discharge	Grab sample																																					
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Bringelly Brickworks Extension Project

EPL1808

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments
M3.1	Testing methods - concentration limits Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence the pollutant; or b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place. must be done in accordance with: a) any methodology which is required by or under the Act to be used for the testing of the concentration of Note: The Protection of the Environment Operations (Clean Air) Regulation 2010 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".	Compliant		
M3.2	Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.	Compliant		
M4	Testing methods - load limits Note: Division 3 of the Protection of the Environment Operations (General) Regulation 2009 requires that monitoring of actual loads of assessable pollutants listed in L2.2 must be carried out in accordance with the relevant load calculation protocol set out for the fee-based activity classification listed in the Administrative Conditions of this licence.	Compliant		
M5.1	Recording of pollution complaints The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	Compliant		There have been no complaints in the last 12 months.
M5.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	Compliant		There have been no complaints in the last 12 months.
M5.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	Compliant		There have been no complaints in the last 12 months.
M5.4	The record must be produced to any authorised officer of the EPA who asks to see them.	Compliant		There have been no request for complaints records to date.

Bringelly Brickworks Extension Project

EPL1808

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments
M6.1	Telephone complaints line The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or	Compliant		A phone line is operated and the number is signposted at the entrance to the site.
M6.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	Compliant		A phone line is operated and the number is signposted at the entrance to the site.
M6.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Compliant		
6	Reporting Conditions			
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions, 4. a Statement of Compliance - Load based Fee, 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan, 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data, 7. a Statement of Compliance - Environmental Management Systems and Practices; and 8. a Statement of Compliance - Environmental Improvement Works. At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	Compliant		An Annual Return has been submitted each year.
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.	Compliant		
R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.	Compliant		Not required to date
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	Compliant		Not required to date
R1.5	The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').	Compliant		An Annual Return has been submitted each year.

Bringelly Brickworks Extension Project

EPL1808

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments
R1.6	Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date. The notification must specify: a) the assessable pollutants for which the actual load could not be calculated; and b) the relevant circumstances that were beyond the control of the licensee.	Compliant		Not required to date
R1.7	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Compliant		records are maintained
R1.8	Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder.	Compliant		
R2.1	Notification of environmental harm Notifications must be made by telephoning the Environment Line service on 131 555.	Compliant		Not required to date
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred. Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	Compliant		Not required to date
R3.1	Written report Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, 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 to which the licence applies), the authorised officer may request a written report of the event.	Compliant		Not required in the last 12 months.
R3.2	The licensee must 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.	Compliant		Not required in the last 12 months.
R3.3	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 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 g) any other relevant matters.	Compliant		Not required in the last 12 months.

Bringelly Brickworks Extension Project

EPL1808

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments												
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	Compliant		Not required in the last 12 months.												
7	General Conditions															
G1.1	Copy of licence kept at the premises or plant A copy of this licence must be kept at the premises to which the licence applies.	Compliant														
G1.2	The licence must be produced to any authorised officer of the EPA who asks to see it.	Compliant		Not required in the last 12 months.												
G1.3	The licence must be available for inspection by any employee or agent of the licensee working at the premises.	Compliant		Not required in the last 12 months.												
G2.1	Completed Programs <table><tr><th>PRP</th><th>Description</th><th>Completed Date</th></tr><tr><td>PRP 1 - WATER MONITORING PROGRAM</td><td>Water monitoring program for conductivity in discharges into Thompsons Creek from Licensed Discharge Point 4.</td><td>30-May-2014</td></tr><tr><td>PRP 2 - WATER MANAGEMENT PLAN</td><td>Protect and reduce the impact on Thompsons Creek by preparing a Water Management Plan (WMP) which outlines options to improve on site water management and reduce pollutant loads discharged from the site to Thompsons Creek.</td><td>13-November-2015</td></tr></table>	PRP	Description	Completed Date	PRP 1 - WATER MONITORING PROGRAM	Water monitoring program for conductivity in discharges into Thompsons Creek from Licensed Discharge Point 4.	30-May-2014	PRP 2 - WATER MANAGEMENT PLAN	Protect and reduce the impact on Thompsons Creek by preparing a Water Management Plan (WMP) which outlines options to improve on site water management and reduce pollutant loads discharged from the site to Thompsons Creek.	13-November-2015	Compliant					
PRP	Description	Completed Date														
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8	Special Conditions															
E1.1	Summary Table of Special Conditions Completed <table><tr><th>No.</th><th>Special Condition</th><th>Description</th><th>Completed Date</th></tr><tr><td>1</td><td>Water Quality</td><td>To submit a report confirming details of all surface water; process water and effluent management systems; all existing sedimentation controls; modifications required; and timetable for implementation.</td><td>1 Nov 2002</td></tr><tr><td>2</td><td>Surface water management options</td><td>To submit a report on the best utilisation of water from dams 5 & 6.</td><td>1 Mar 2005</td></tr></table>	No.	Special Condition	Description	Completed Date	1	Water Quality	To submit a report confirming details of all surface water; process water and effluent management systems; all existing sedimentation controls; modifications required; and timetable for implementation.	1 Nov 2002	2	Surface water management options	To submit a report on the best utilisation of water from dams 5 & 6.	1 Mar 2005	Compliant		
No.	Special Condition	Description	Completed Date													
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Bringelly Brickworks Extension Project

ML1731 (Act 1992) and Variation from 1/5/2017

Compliant

Non Compliant: H Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence

Non Compliant: M Non-compliance with: • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences, but is likely to occur

Non Compliant: L Non-compliance with: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur

Not Triggered Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

Number	Condition	Details of compliance status	Where addressed in Annual Review	Comments
1 a)	Notice to Landholders Within a period of three months from the date of grant/renewal of this mining lease, the lease holder must serve on each landholder a notice in writing indicating that this mining lease has been granted/renewed and whether the lease includes the surface. A plan identifying each landholder and individual land parcel subject to the lease area, and a description of the lease area must accompany the notice.	Compliant	Section 3.3	PGH are the landholder.
1 b)	If there are ten or more landholders, the lease holder may serve the notice by publication in a newspaper circulating in the region where the lease area is situated. The notice must indicate that this mining lease has been granted/renewed; state whether the lease includes the surface and must contain a plan and description of the lease area. If a notice is made under condition 1(b), compliance with condition 1(a) is not required.	Compliant	-	PGH are the landholder.
2	Rehabilitation Any disturbance resulting from the activities carried out under this mining lease must be rehabilitated to the satisfaction of the Minister.	Compliant	Section 3.3	Rehabilitation to date has been reviewed in the ARR submitted to the DPE annually and approved. Rehabilitation to date has been consistent with the Objectives and approved RMP.
3 a)	Mining Operations Plan and Annual Rehabilitation Report The lease holder must comply with an approved Mining Operations Plan (MOP) in carrying out any significant surface disturbing activities, including mining operations, mining purposes and prospecting. The lease holder must apply to the Minister for approval of a MOP. An approved MOP must be in place prior to commencing any significant surface disturbing activities, including mining operations, mining purposes and prospecting.	Compliant	Section 3.3	A MOP has been submitted and approved by the DPE however the mining operations under the new consent have not commenced.
3 b)	The MOP must identify the post mining land use and set out a detailed rehabilitation strategy which: (i) identifies areas that will be disturbed; (ii) details the staging of specific mining operations, mining purposes and prospecting; (iii) identifies how the mine will be managed and rehabilitated to achieve the post mining land use; (iv) identifies how mining operations, mining purposes and prospecting will be carried out in order to prevent and or minimise harm to the environment; and (v) reflects the conditions of approval under: •the Environmental Planning and Assessment Act 1979; •the Protection of the Environment Operations Act 1997; and •any other approvals relevant to the development including the conditions of this mining lease.	Compliant	Section 3.3	A MOP has been submitted and approved by the DPE and covers these items.
3 c)	The MOP must be prepared in accordance with the ESG3: Mining Operations Plan (MOP) Guidelines September 2013 published on the Department's website at www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines	Compliant	Section 3.3	A MOP has been submitted and approved by the DPE and was prepared in accordance with the guideline.
3 d)	The lease holder may apply to the Minister to amend an approved MOP at any time.	Compliant	-	Not required at this time.

Bringelly Brickworks Extension Project

ML1731 (Act 1992) and Variation from 1/5/2017

Compliant

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Not Triggered Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

Number	Condition	Details of compliance status	Where addressed in Annual Review	Comments
3 e)	It is not a breach of this condition if: (i) the operations which, but for this condition 3(e) would be a breach of condition 3(a), were necessary to comply with a lawful order or direction given under the Environmental Planning and Assessment Act 1979, the Protection of the Environment Operations Act 1997, the Work Health and Safety (Mines and Petroleum Sites) Act 2013 and Work Health and Safety (Mines and Petroleum Sites) Regulation 2014 or the Work Health and Safety Act 2011; and Work Health and Safety Regulation 2011 (ii) the Minister had been notified in writing of the terms of the order or direction prior to the operations constituting the breach being carried out.	Compliant	-	
3 f)	The lease holder must prepare a Rehabilitation Report to the satisfaction of the Minister. The report must: (i) provide a detailed review of the progress of rehabilitation against the performance measures and criteria established in the approved MOP; (ii) be submitted annually on the grant anniversary date (or at such other times as agreed by the Minister); and (iii) be prepared in accordance with any relevant annual reporting guidelines published on the Department's website at www.resourcesandenergy.nsw.gov.au/miners-and-explorers/rules-and-forms/pgf/environmental-guidelines Note: The Rehabilitation Report replaces the Annual Environmental Management Report.	Compliant	Section 3.3	The ML was granted in March 2016. The DPE has approved that the completion date for the ARR's will now correspond to the financial year in line with the Annual Review required by DPIE.
4 a)	The lease holder must notify the Department upon becoming aware of any breaches of the conditions of this mining lease or breaches of the Mining Act or Regulations;	Compliant	Section 3.3	The operations have not commenced under the new consent and there have been no breaches of this ML to date.
4 b)	Notifications under condition 4(a) must be provided in the form specified on the Department's website within seven (7) days of the mining lease holder becoming aware of the breach.	Compliant	Section 3.3	The operations have not commenced under the new consent and there have been no breaches of this ML to date.
5	Environmental Incident Report The lease holder must provide environmental incident notifications and reports to the Secretary no later than seven (7) days after those environmental incident notifications and reports are provided to the relevant authorities under the Protection of the Environment Operations Act 1997.	Compliant	Section 3.3	The operations have not commenced under the new consent and there have been no incidents to date.
6	Resource Recovery The lease holder must optimise recovery of the minerals that are the subject of this mining lease to the extent economically feasible.	Compliant	-	The operations have not commenced under the new consent.

Bringelly Brickworks Extension Project
ML1731 (Act 1992) and Variation from 1/5/2017

Compliant				
Non Compliant: H	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence			
Non Compliant: M	Non-compliance with: • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences, but is likely to occur			
Non Compliant: L	Non-compliance with: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur			
Not Triggered	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)			
Number	Condition	Details of compliance status	Where addressed in Annual Review	Comments
7	Security The lease holder is required to provide and maintain a security deposit to secure funding for the fulfilment of obligations of all or any kind under the mining lease, including obligations of all or any kind under the mining lease that may arise in the future. The amount of the security deposit to be provided has been assessed by the Minister at \$776,000.	Compliant	Section 3.3	Security has been provided.
8	Cooperation Agreement The lease holder must make every reasonable attempt, and be able to demonstrate its attempts, to enter into a cooperation agreement with the holder(s) of any overlapping title(s). The cooperation agreement should address but not be limited to issues such as: access arrangements operational interaction procedures dispute resolution information exchange well location timing of drilling potential resource extraction conflicts; and rehabilitation issues.	Compliant	-	Not Required
	Exploration Reporting Note: Exploration Reports (Geological and Geophysical) The lease holder must lodge reports to the satisfaction of the Minister in accordance with section 163C of the Mining Act 1992 and in accordance with clause 59 of the Mining Regulation 2016. Reports must be prepared in accordance with Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales.	Compliant	Section 3.3	An exploration report was submitted in April 2021.

Bringelly Brickworks Extension Project

Water Licence 10BL605770 for monitoring bores

- Compliant
- Non Compliant: High Risk
- Non Compliant: Medium Risk
- Non Compliant: Low Risk
- Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments
1	The licence shall lapse if the work is not commenced and completed within 3 years of the date of the issue of the licence.	Compliant	Section 3.5 & 8.4	The bores have been installed.
2	The licensee shall within 2 months of completion or after the issue of the licence of the work is existing, furnish to NSW Office of Water: a) details of the work set out in the attached Form "A" (completed by a driller). b) A plan showing accurately the location of the work, in relation to portion and property boundaries. c) A one litre water sample for all licences other than those for stock, domestic, test bores and farming purposes. d) details of any water analysis and/or pumping tests.	Compliant	Section 3.5 & 8.4	The Form A, location plan and analysis details have been provided to DPI Water in 2015 with the application for the bore licence.
3	The licensee shall allow NSW Office of Water or any person authorised by it, full and free access to the works, either during or after construction, for the purpose of carrying out inspection or test of the works and its fittings and shall carry out any work or alterations deemed necessary by the department for the protection and proper maintenance of the works, or the control of the water extracted and for the protection of the quality and the prevention from pollution or contamination of sub-surface water.	Compliant	Section 3.5 & 8.4	Not required to date.
4	If during the construction of the work, saline ot polluted water is encountered above the producing aquifer, such water shall be sealed offby: a) inserting the appropriate length of casing to a depth sufficient to exclude the saline or polluted water from the work b) cementing between the casing(s) and the walls of the bore hole from the bottom of the casing to ground level. Any departure from these procedures must be approved by the Department before undertaking the work.	Compliant	Section 3.5 & 8.4	Not required to date.
5	a) the licensee shall notify NSW Office of Water if a flowing supply of water is obtained. The bore shall then be lined with casing and cemented and a suitable closing gear shall be attached to the bore head as specified by NSW Office of Water. B) if a flowing supply of water is obtained from the work, the licensee shall only distribute water from the bore head by a system of pipelines and shall not distribute it in drains, natural or artificial channels or depressions.	Compliant	Section 3.5 & 8.4	Not required to date.
6	If a work is abandoned at any time the licensee shall notify NSW Office of Water that the work has been abandoned and seal off the aquifer by: a) backfilling the work to the ground level with clay or cement after withdrawing the casing (lining); or b) Such methods as agreed to or directed by NSW Office of Water.	Compliant	Section 3.5 & 8.4	Not required to date.
7	The licensee shall not allow any tailwater/drainage to discharge into or onto: any adjoining public or crown road; any other persons land; any Crown land; any river, creek or watercourse; any native vegetation as described under the native Vegetation Conservation Act 1997; Any wetlands of environmental significance.	Compliant	Section 3.5 & 8.4	There is no discharge from the monitoring bores.
8	Works used for the purpose of conveying, distributing or storing water taken by means of the licenced work shall not be constructed or installed so as to obstruct the reasonable passage of flood waters flowing into or from a river.	Compliant	Section 3.5 & 8.4	Not required to date.
9	If the bore authorised by this licence is lines with steel or plastic casing the inside diameter of that casing shall not exceed 220mm.	Compliant	Section 3.5 & 8.4	bore diameters are approxiamtely 60mm.
10	Water shall not be pumped from the bore authorised by this licence from any purpose other than groundwater investigation.	Compliant	Section 3.5 & 8.4	
11	Subject to condition (12) the licensee shall within 2 months of the date of completion of the bore authorised by the licence, 1) backfill it with clay or cement to ground level after withdrawing any casing (lining) or: 2) render it ineffective by any other means acceptable to the Department.	Compliant	Section 3.5 & 8.4	Not required to date.
12	Condition 11 shall have no force or effect if: 1) at the relevant time there is wothj NSW Office of Water, an application in respect of which the Department has not made a decision to convert the groundwater investigation bore into a production bore; or 2) The licensee has completed the bore for the purpose of measuring water levels or water quality by the addition of casing with a diameter not exceeding 220mm.	Compliant	Section 3.5 & 8.4	Not required to date.

Bringelly Brickworks Extension Project

Water Licence WAL26259- Surface Water

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments
	Unregulated River; Hawkesbury and Lower Nepean Rivers Water Source; Upper South Creek Management Zone; Share components 150.0			
MW0112-00001	The maximum water allocation that may be carried over in the account for this access licence from one water year to the next water year is: A. a volume equal to 100 % of the share component of the licence, or B. 1 ML/unit share of the share component of the licence.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0036-00002	The volume of water taken in any three (3) consecutive water years from 1 July 2012 must be recorded in the logbook at the end of those three water years. The maximum volume of water permitted to be taken in those years must also be recorded in the logbook.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0605-00001	Water must be taken in compliance with the conditions of the approval for the nominated work on this access licence through which water is to be taken. This restriction does not apply if water is to be taken: A. from an off-river pool, an in-river pool, a runoff harvesting dam or an in-river dam pool, or B. from the following Weirs: Maldon, Douglas Park, Menangle, Camden, Sharpes, Cobbity, Mount Hunter Rivulet, Brownlow Hill, Theresa Park and Wallacia.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0080-00012	From 1 July 2011, water must not be taken from the Upper South Creek Management Zone of the Hawkesbury and Lower Nepean Rivers Water Source when flows are in the Very Low Flow Class, which means that the flow is 0.2 ML/day or less at South Creek at the Great Western Highway gauge [No. 212048]. This restriction does not apply if water is to be taken from a runoff harvesting dam or an in-river dam pool.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0078-00004	In the Upper South Creek Management Zone of the Hawkesbury and Lower Nepean Rivers Water Source, if the flow is less than 0.2 ML/day at South Creek at the Great Western Highway gauge [No. 212048] for a period of 24 or more consecutive hours, then there must be a minimum flow of 0.2 ML/day at that gauge for at least 24 hours before water can be taken.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0004-00002	From 1 July 2012, the total volume of water taken in any three (3) consecutive water years under this access licence must not exceed a volume which is equal to the lesser of either: A. the sum of: i. water in the account from the available water determinations in those 3 consecutive water years, plus ii. water in the account carried over from the water year prior to those 3 consecutive water years, plus iii. any net amount of water assigned to or from this account under a water allocation assignment in those 3 consecutive water years, plus iv. any water re-credited by the Minister to the account in those 3 consecutive water years, or B. the sum of: i. the share component of this licence at the beginning of the first year in those 3 consecutive water years, plus ii. the share component of this licence at the beginning of the second year in those 3 consecutive water years, plus iii. the share component of this licence at the beginning of the third year in those 3 consecutive water years, plus iv. any net amount of water assigned to or from this account under a water allocation assignment in those 3 consecutive water years, plus v. any water re-credited by the Minister to the account in those 3 consecutive water years.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2338-00001	The completed logbook must be retained for five (5) years from the last date recorded in the logbook.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2337-00001	The following information must be recorded in the logbook for each period of time that water is taken: A. date, volume of water, start and end time when water was taken as well as the pump capacity per unit of time, and B. the access licence number under which the water is taken, and C. the approval number under which the water is taken, and D. the volume of water taken for domestic consumption and/or stock watering.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2339-00001	A logbook must be kept, unless the work is metered and fitted with a data logger. The logbook must be produced for inspection when requested by the relevant licensor	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0051-00002	Once the licence holder becomes aware of a breach of any condition on this access licence, the licence holder must notify the Minister as soon as practicable. The Minister must be notified by: A. email: water.enquiries@dpi.nsw.gov.au, or B. telephone: 1800 353 104. Any notification by telephone must also be confirmed in writing within seven (7) business days of the telephone call.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.

Bringelly Brickworks Extension Project

Water Licence WAL26257- Surface Water

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments
	Domestic and Stock; Hawkesbury and Lower Nepean Rivers Water Source; Upper South Creek Management Zone; Share components 6.50			
MW0112-00001	The maximum water allocation that may be carried over in the account for this access licence from one water year to the next water year is: A. a volume equal to 100 % of the share component of the licence, or B. 1 ML/unit share of the share component of the licence.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW4215-00001	Water may be taken for domestic consumption not exceeding 1 kL/house per day: A. when flows in the Upper South Creek Management Zone of the Hawkesbury and Lower Nepean Rivers Water Source are in the Very Low Flow Class which means that the flow is 0.2 ML/day or less at the South Creek Great Western Highway gauge [No. 212048], or B. when there is no visible flow at the location at which the water proposed to be taken, or C. if water is taken from an in-river, off-river pool, natural pool, lake or lagoon, when the volume of water in that pool lake or lagoon is less than at full capacity.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0036-00002	The volume of water taken in any three (3) consecutive water years from 1 July 2012 must be recorded in the logbook at the end of those three water years. The maximum volume of water permitted to be taken in those years must also be recorded in the logbook.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0605-00001	Water must be taken in compliance with the conditions of the approval for the nominated work on this access licence through which water is to be taken. This restriction does not apply if water is to be taken: A. from an off-river pool, an in-river pool, a runoff harvesting dam or an in-river dam pool, or B. from the following Weirs: Maldon, Douglas Park, Menangle, Camden, Sharpes, Cobbity, Mount Hunter Rivulet, Brownlow Hill, Theresa Park and Wallacia.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW4251-00001	Water must not be taken for stock watering: A. when flows in the Upper South Creek Management Zone of the Hawkesbury and Lower Nepean Rivers Water Source are in the Very Low Flow Class, which means that the flow is 0.2 ML/day or less at the South Creek Great Western Highway gauge [No. 212048], or B. when there is no visible flow in the water source at the location where water is to be taken. These restrictions do not apply if water is to be taken from a runoff harvesting dam or an in-river dam pool.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0004-00002	From 1 July 2012, the total volume of water taken in any three (3) consecutive water years under this access licence must not exceed a volume which is equal to the lesser of either: A. the sum of: i. water in the account from the available water determinations in those 3 consecutive water years, plus ii. water in the account carried over from the water year prior to those 3 consecutive water years, plus iii. any net amount of water assigned to or from this account under a water allocation assignment in those 3 consecutive water years, plus iv. any water re-credited by the Minister to the account in those 3 consecutive water years, or B. the sum of: i. the share component of this licence at the beginning of the first year in those 3 consecutive water years, plus ii. the share component of this licence at the beginning of the second year in those 3 consecutive water years, plus iii. the share component of this licence at the beginning of the third year in those 3 consecutive water years, plus iv. any net amount of water assigned to or from this account under a water allocation assignment in those 3 consecutive water years, plus v. any water re-credited by the Minister to the account in those 3 consecutive water years.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MA2455-00012	Water must be used for the purpose of domestic consumption and stock watering.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2338-00001	The completed logbook must be retained for five (5) years from the last date recorded in the logbook.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2337-00001	The following information must be recorded in the logbook for each period of time that water is taken: A. date, volume of water, start and end time when water was taken as well as the pump capacity per unit of time, and B. the access licence number under which the water is taken, and C. the approval number under which the water is taken, and D. the volume of water taken for domestic consumption and/or stock watering.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2339-00001	A logbook must be kept, unless the work is metered and fitted with a data logger. The logbook must be produced for inspection when requested by the relevant licensor.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0051-00002	Once the licence holder becomes aware of a breach of any condition on this access licence, the licence holder must notify the Minister as soon as practicable. The Minister must be notified by: A. email: water.enquiries@dpi.nsw.gov.au, or B. telephone: 1800 353 104. Any notification by telephone must also be confirmed in writing within seven (7) business days of the telephone call.	Compliant	Section 3.6	No water has been drawn from the WALs over the reporting period.

Bringelly Brickworks Extension Project

Water Licence WAL25987- Surface Water

Compliant
Non Compliant: High Risk
Non Compliant: Medium Risk
Non Compliant: Low Risk
Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments
	Unregulated River; Hawkesbury and Lower Nepean Rivers Water Source; Upper South Creek Management Zone; Share components 152.5			
MW0112-00001	The maximum water allocation that may be carried over in the account for this access licence from one water year to the next water year is: A. a volume equal to 100 % of the share component of the licence, or B. 1 ML/unit share of the share component of the licence.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0036-00002	The volume of water taken in any three (3) consecutive water years from 1 July 2012 must be recorded in the logbook at the end of those three water years. The maximum volume of water permitted to be taken in those years must also be recorded in the logbook.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0605-00001	Water must be taken in compliance with the conditions of the approval for the nominated work on this access licence through which water is to be taken. This restriction does not apply if water is to be taken: A. from an off-river pool, an in-river pool, a runoff harvesting dam or an in-river dam pool, or B. from the following Weirs: Maldon, Douglas Park, Menangle, Camden, Sharpes, Cobbity, Mount Hunter Rivulet, Brownlow Hill, Theresa Park and Wallacia.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0080-00012	From 1 July 2011, water must not be taken from the Upper South Creek Management Zone of the Hawkesbury and Lower Nepean Rivers Water Source when flows are in the Very Low Flow Class, which means that the flow is 0.2 ML/day or less at South Creek at the Great Western Highway gauge [No. 212048]. This restriction does not apply if water is to be taken from a runoff harvesting dam or an in-river dam pool.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0670-00001	Water must only be taken if there is visible flow in the water source at the location where water is to be taken. This restriction does not apply if water is to be taken: A. from an off-river pool, an in-river pool, a runoff harvesting dam or an in-river dam pool, or B. from the following Weirs: Maldon, Douglas Park, Menangle, Camden, Sharpes, Cobbity, Mount Hunter Rivulet, Brownlow Hill, Theresa Park and Wallacia.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0078-00004	In the Upper South Creek Management Zone of the Hawkesbury and Lower Nepean Rivers Water Source, if the flow is less than 0.2 ML/day at South Creek at the Great Western Highway gauge [No. 212048] for a period of 24 or more consecutive hours, then there must be a minimum flow of 0.2 ML/day at that gauge for at least 24 hours before water can be taken.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0004-00002	From 1 July 2012, the total volume of water taken in any three (3) consecutive water years under this access licence must not exceed a volume which is equal to the lesser of either: A. the sum of: i. water in the account from the available water determinations in those 3 consecutive water years, plus ii. water in the account carried over from the water year prior to those 3 consecutive water years, plus iii. any net amount of water assigned to or from this account under a water allocation assignment in those 3 consecutive water years, plus iv. any water re-credited by the Minister to the account in those 3 consecutive water years, or B. the sum of: i. the share component of this licence at the beginning of the first year in those 3 consecutive water years, plus ii. the share component of this licence at the beginning of the second year in those 3 consecutive water years, plus iii. the share component of this licence at the beginning of the third year in those 3 consecutive water years, plus iv. any net amount of water assigned to or from this account under a water allocation assignment in those 3 consecutive water years, plus v. any water re-credited by the Minister to the account in those 3 consecutive water years.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2338-00001	The completed logbook must be retained for five (5) years from the last date recorded in the logbook.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2337-00001	The following information must be recorded in the logbook for each period of time that water is taken: A. date, volume of water, start and end time when water was taken as well as the pump capacity per unit of time, and B. the access licence number under which the water is taken, and C. the approval number under which the water is taken, and D. the volume of water taken for domestic consumption and/or stock watering.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2339-00001	A logbook must be kept, unless the work is metered and fitted with a data logger. The logbook must be produced for inspection when requested by the relevant licensor.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0051-00002	Once the licence holder becomes aware of a breach of any condition on this access licence, the licence holder must notify the Minister as soon as practicable. The Minister must be notified by: A. email: water.enquiries@dpi.nsw.gov.au, or B. telephone: 1800 353 104. Any notification by telephone must also be confirmed in writing within seven (7) business days of the telephone call.	Compliant	Section 3.6	No water has been drawn from the WALs over the reporting period.

Bringelly Brickworks Extension Project

Water Approval 10CA104657 for WAL26259

Compliant

Non Compliant: High Risk

Non Compliant: Medium Risk

Non Compliant: Low Risk

Not Triggered

Condition	Commitment	Details of compliance status	Where addressed in Annual Review	Comments
	Water supply works and water use, expiry 20/4/2026; Hawkesbury and Lower Nepean Rivers Water Source; Diversion works - pumps; 80mm centrifugal pump; irrigation purpose			
MW0655-00001	Any water supply work authorised by this approval must take water in compliance with the conditions of the access licence under which water is being taken.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0911-00001	Before water is taken through the water supply work authorised by this approval, visible flow in the water source at the location at which water is proposed to be taken must be confirmed. If a logbook is required to be kept: A. confirmation that water may be taken, and B. the method of confirmation, such as visual inspection, internet search must be recorded in the logbook.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2435-00001	Water must be taken through the approved metering equipment installed on the water supply work authorised by this approval.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0080-00012	From 1 July 2011, water must not be taken from the Upper South Creek Management Zone of the Hawkesbury and Lower Nepean Rivers Water Source when flows are in the Very Low Flow Class, which means that the flow is 0.2 ML/day or less at South Creek at the Great Western Highway gauge [No. 212048]. This restriction does not apply if water is to be taken from a runoff harvesting dam or an in-river dam pool.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2338-00001	The completed logbook must be retained for five (5) years from the last date recorded in the logbook.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2336-00001	The purpose or purposes for which water is taken, as well as details of the type of crop, area cropped, and dates of planting and harvesting, must be recorded in the logbook each time water is taken.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2337-00001	The following information must be recorded in the logbook for each period of time that water is taken: A. date, volume of water, start and end time when water was taken as well as the pump capacity per unit of time, and B. the access licence number under which the water is taken, and C. the approval number under which the water is taken, and D. the volume of water taken for domestic consumption and/or stock watering.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW2339-00001	A logbook must be kept, unless the work is metered and fitted with a data logger. The logbook must be produced for inspection when requested by the relevant licensor.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0482-00001	Where a water meter is installed on a water supply work authorised by this approval, the meter reading must be recorded in the logbook before taking water. This reading must be recorded every time water is to be taken.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW0051-00001	Once the approval holder becomes aware of a breach of any condition on this access licence, the licence holder must notify the Minister as soon as practicable. The Minister must be notified by: A. email: water.enquiries@dpi.nsw.gov.au, or B. telephone: 1800 353 104. Any notification by telephone must also be confirmed in writing within seven (7) business days of the telephone call.	Compliant	Section 3.5	No water has been drawn from the WALs over the reporting period.
MW3860-00001	A. When a water supply work authorised by this approval is no longer to be used permanently, the approval holder must: i. notify the relevant licensor in writing of the intention to decommission the work at least 90 days before the start of decommissioning, and ii. decommission the work, unless the approval holder receives notice in writing from the Minister within 60 days of notifying DPI Water requiring that the work is not to be decommissioned or be decommissioned in accordance with specific requirements. B. Within 60 days of the work being decommissioned, the approval holder must notify the relevant licensor in writing that the work has been decommissioned.	Compliant	Section 3.6	No water has been drawn from the WALs over the reporting period.
DK0888-00001	Any water supply work authorised by this approval used for the purpose of conveying, diverting or storing water must be constructed or installed to allow free passage of floodwaters flowing into or from a river or lake.	Compliant	Section 3.7	No water has been drawn from the WALs over the reporting period.
DK0878-00001	A. The construction, installation or use of the water supply work authorised by this approval must not cause or increase erosion to the channel or bank of the watercourse. B. If erosion is observed, the area must be stabilised with grass cover, stone pitching or any other material that will prevent any further occurrence of erosion.	Compliant	Section 3.8	No water has been drawn from the WALs over the reporting period.
DS2349-00001	The approval holder must make all reasonable efforts not to allow any used water to discharge, by any means including surface or subsurface drains or pipes, into or onto: - any adjoining public or crown road; - any other person's land; - any Crown land; - any river, creek or watercourse or aquifer.	Compliant	Section 3.9	No water has been drawn from the WALs over the reporting period.

Appendix I


Production Data for

DRE

Tara O'Brien

From: Gauci, Joe <JGauci@csr.com.au>
Sent: Tuesday, 7 September 2021 10:30 AM
To: Tara O'Brien
Subject: RE: Brignelly ARR

Tara,
See below.



[Change Password](#)
[List of Clients](#)

Royalty online services

Welcome Joe Gauci

Your password will expire on Sat 8 January 2022 3:43:27 pm

Confirmation

Client name:	BRINGELLY QUARRY
Client ID:	140207573
RIMS ID:	323188
Reference number:	778203740165
Period:	1 July 2020 - 30 June 2021
Lodgement date:	20 July 2021
Return due date:	31 July 2021
Royalty amount due:	Nil

Payment options

No payment required on this return

[Print](#) [Show return](#) [Finish](#)

Joe Gauci | National Raw Materials Manager
CSR Masonry & Insulation
Bradford, Monier, PGH
59-67 Cecil Road, Cecil Park, NSW, 2178, Australia
T: 02 9826 3964 | M: 0417 683 526 | E: jgauci@csr.com.au

Appendix J Management Plan Approval Correspondence



Ms Debbie Cook
National WHSE Manager
PGH Bricks and Pavers
Triniti 3, 39 Delhi Road
North Ryde NSW 2113

Dear Ms Cook,

**Bringelly Brickworks Extension (SSD 5684)
Approval of Environmental Management Plans**

I refer to your email dated 9 December 2019, seeking the Secretary's approval of several revised environmental management plans for the Bringelly Brickworks Extension (SSD 5684).

The Department has carefully considered the revised versions of the environmental management plans:

- *Noise Management Plan* (Version 4), required by condition 6, Schedule 3;
- *Air Quality Management Plan* (Version 5), required by condition 9, Schedule 3;
- *Transport Management Plan* (Version 1), required by condition 15, Schedule 3;
- *Water Management Plan* (Version 3), required by condition 18, Schedule 3;
- *Heritage Management Plan* (Version 4), required by condition 27, Schedule 3; and
- *Environmental Management Strategy* (Version 4), required by condition 1, Schedule 5.

That Department is satisfied that these plans now address the relevant conditions of SSD 5684. Consequently, the Secretary has approved these plans.

Please make copies of the approved plans available on your website at your earliest convenience.

Should you have any enquiries in relation to this matter, please contact Joel Herbert.

Yours sincerely,

12/12/2019

Matthew Sprott
Director
Resource Assessments
as the Secretary's nominee

Appendix K

Stack Testing Report



Ektimo

REPORT NUMBER R010542

Emission Testing Report

PGH Bricks & Pavers Pty Ltd, Bringelly Plant

Document Information

Template Version: 240920

Client Name: PGH Bricks & Pavers Pty Ltd (Bringelly)
Report Number: R010542
Date of Issue: 3 May 2021
Attention: Michelle Yeoh
Address: Lot 2 Greendale Rd
Bringelly NSW 2556
Testing Laboratory: Ektimo Pty Ltd, ABN 86 600 381 413

Report Authorisation



Hamish Proust
Air Monitoring
Consultant

NATA Accredited Laboratory
No. 14601

Graham Edwards
Senior Air Monitoring
Consultant

Accredited for compliance with ISO/IEC 17025 - Testing. NATA is a signatory to the ILAC mutual recognition arrangement for the mutual recognition of the equivalence of testing, calibration and inspection reports.

This document is confidential and is prepared for the exclusive use of PGH Bricks & Pavers Pty Ltd (Bringelly) and those granted permission by PGH Bricks & Pavers Pty Ltd (Bringelly).
The report shall not be reproduced except in full.

Please note that only numerical results pertaining to measurements conducted directly by Ektimo are covered by Ektimo's terms of NATA accreditation. This does not include comments, conclusions or recommendations based upon the results. Refer to 'Test Methods' for full details of testing covered by NATA accreditation.

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1 EXECUTIVE SUMMARY

1.1 Background

Ektimo was engaged by PGH Bricks & Pavers Pty Ltd to perform emission testing at their Bringelly plant. Testing was carried out in accordance with Environment Protection Licence 1808.

1.2 Project Objectives

The objectives of the project were to conduct a monitoring programme to quantify emissions from one discharge point to determine compliance with PGH Bricks & Pavers Pty Ltd's Environment Protection Licence 1808.

Monitoring was performed as follows:

Location	Test Date	Test Parameters*
EPA 2 – Kiln Stack	30 March 2021	Total solid particles, particulate matter <10µm (PM ₁₀) Sulfur dioxide Sulfur trioxide and sulfuric acid mist (as SO ₃) Total fluoride, hydrogen chloride Nitrogen oxides, oxygen

* Flow rate, velocity, temperature and moisture were also determined.

All results are reported on a dry basis at STP.

Plant operating conditions have been noted in the report.

1.3 Licence Comparison

The following licence comparison table shows that all analytes highlighted in green are within the licence limit set by the NSW EPA as per licence 1808 (last amended on 11 August 2020).

EPA No.	Location Description	Pollutant	Units	Licence Limit	Detected Values 30/03/2021	Mass Rate (g/min)
2	Kiln Exhaust Stack	Total Solid Particles	mg/m ³	100	5.9	4.5
		Nitrogen Oxides (as NO ₂)	mg/m ³	2000	39	29
		Total Fluoride (as HF)	mg/m ³	50	8.6	6.6

Please note that the measurement uncertainty associated with the test results was not considered when determining whether the results were compliant or non-compliant.

Refer to the Test Methods table for the measurement uncertainties.

2 RESULTS

2.1 EPA 2 – Kiln Stack

Date	30/03/2021	Client	PGH Bricks and Pavers Pty Ltd
Report	R010542	Stack ID	EPA 2 - Kiln Stack
Licence No.	1808	Location	Bringelly
Ektimo Staff	Aaron Davis / Scott Woods	State	NSW
Process Conditions	Push rate 16 cars/day, Product: Paint Grade Smooths, Soak Temperature: 1035C		

210323

Sampling Plane Details

Sampling plane dimensions	1440 mm
Sampling plane area	1.63 m ²
Sampling port size, number	4" BSP (x2)
Access & height of ports	Stairs & fixed ladder 20 m
Duct orientation & shape	Vertical Circular
Downstream disturbance	Exit 2.5 D
Upstream disturbance	Centrifugal fan 8 D
No. traverses & points sampled	2 12
Sample plane compliance to AS4323.1	Ideal

Stack Parameters

Moisture content, %v/v	6.2
Gas molecular weight, g/g mole	28.4 (wet) 29.1 (dry)
Gas density at STP, kg/m ³	1.27 (wet) 1.30 (dry)

Gas Flow Parameters

Flow measurement time(s) (hhmm)	0945 & 1055
Temperature, °C	153
Temperature, K	426
Velocity at sampling plane, m/s	13
Volumetric flow rate, actual, m ³ /s	21
Volumetric flow rate (wet STP), m ³ /s	14
Volumetric flow rate (dry STP), m ³ /s	13
Mass flow rate (wet basis), kg/hour	62000

Gas Analyser Results		Average		Minimum		Maximum	
		1000 - 1059		1000 - 1059		1000 - 1059	
Combustion Gases	Sampling time	Concentration mg/m³	Mass Rate g/min	Concentration mg/m³	Mass Rate g/min	Concentration mg/m³	Mass Rate g/min
	Nitrogen oxides (as NO ₂)	39	29	27	21	41	31
		Concentration % v/v		Concentration % v/v		Concentration % v/v	
	Oxygen	18.3		17.9		19.6	

Isokinetic Results

Isokinetic Results	Sampling time	Results	
		950-1052	0950-1052 (PM10)
		Concentration mg/m ³	Mass Rate g/min
Solid Particles		5.9	4.5
Fine particulates (PM10)		<3	<3
Coarse Particulates		5.9	4.5
D50 cut size, 10µm		9.9	
Sulfur dioxide		53	41
Sulfur trioxide and/or Sulfuric acid (as SO ₃)		0.55	0.42
Isokinetic Sampling Parameters		Isokinetic	PM 10
Sampling time, min		60	60
Isokinetic rate, %		97	88
Velocity difference, %		2	2

Date	30/03/2021	Client	PGH Bricks and Pavers Pty Ltd
Report	R010542	Stack ID	EPA 2 - Kiln Stack
Licence No.	1808	Location	Bringelly
Ektimo Staff	Aaron Davis / Scott Woods	State	NSW
Process Conditions	Push rate 16 cars/day, Product: Paint Grade Smooths, Soak Temperature: 1035C		

210323

Sampling Plane Details

Sampling plane dimensions	1440 mm
Sampling plane area	1.63 m ²
Sampling port size, number	4" BSP (x2)
Access & height of ports	Stairs & fixed ladder 20 m
Duct orientation & shape	Vertical Circular
Downstream disturbance	Exit 2.5 D
Upstream disturbance	Centrifugal fan 8 D
No. traverses & points sampled	2 12
Sample plane compliance to AS4323.1	Ideal

Stack Parameters

Feed Parameters		
Moisture content, %v/v	6.6	
Gas molecular weight, g/g mole	28.4 (wet)	29.1 (dry)
Gas density at STP, kg/m ³	1.27 (wet)	1.30 (dry)

Gas Flow Parameters

Flow measurement time(s) (hhmm)	1055 & 1215
Temperature, °C	154
Temperature, K	427
Velocity at sampling plane, m/s	13
Volumetric flow rate, actual, m ³ /s	21
Volumetric flow rate (wet STP), m ³ /s	14
Volumetric flow rate (dry STP), m ³ /s	13
Mass flow rate (wet basis), kg/hour	62000

Isokinetic Results

Sampling time	Results	
	1105-1207	
	Concentration mg/m ³	Mass Rate g/min
Chloride (as HCl)	39	30
Total fluoride (as HF)	8.6	6.6
Isokinetic Sampling Parameters		
Sampling time, min	60	
Isokinetic rate, %	97	
Velocity difference, %	<1	

3 PLANT OPERATING CONDITIONS

The below plant operating conditions have been supplied by PGH Bricks & Pavers Pty Ltd's personnel.

	30 March 2021
Product	Paint Grade Smooths
Push rate	16 cars/day
Soak temperature	1035°C

4 CALIBRATION RECORD

Equipment Type	Equipment name	ID	Office	Type	Last Calibration Date
Nozzles	SS (PM10) nozzle kit	776	NSW	12 Monthly Nozzle Calibrations	6/01/21
Nozzles	Glass Nozzle Kit	859	NSW	12 Monthly Nozzle Calibrations	6/01/21
Analysers	Testo 350 Gas Analyser	866	NSW	6 Monthly Analyser Linearity Checks	5/01/21
Gas Meters	DITGM Gas Meter (Kit 15)	706	NSW	6 Monthly Gas Meter Calibrations	4/01/21
Gas Meters	DITGM Gas Meter (Kit 18)	802	NSW	6 Monthly Gas Meter Calibrations	4/01/21
Manometers	Testo DP-440	997	NSW	12 Monthly Manometer Calibrations	7/01/21
Barometer	Testo 511	245	NSW	6 Monthly Barometer Checks (BOM)	4/01/21
Pitot tube	Pitot tip (s-type)	1000	NSW	6 Monthly Pitot Tube Calibrations	5/01/21
Temp Device	Pyrometer	997	NSW	6 Monthly Temperature Device Checks	7/01/21
Temp Device	Thermocouple	834	NSW	6 Monthly Temperature Device Checks	7/01/21

5 TEST METHODS

All sampling and analysis performed by Ektimo unless otherwise specified. Specific details of the methods are available upon request.

Parameter	Sampling Method	Analysis Method	Uncertainty*	NATA Accredited	
				Sampling	Analysis
Sample plane criteria	NSW TM-1	NA	NA	✓	NA
Flow rate, temperature and velocity	NA	NSW TM-2	8%, 2%, 7%	NA	✓
Moisture content	NSW TM-22	NSW TM-22	8%	✓	✓
Molecular weight	NA	NSW TM-23	not specified	NA	✓
Nitrogen oxides	NSW TM-11	NSW TM-11	12%	✓	✓
Oxygen	NSW TM-25	NSW TM-25	13%	✓	✓
Sulfur dioxide	NSW TM-4	NSW TM-4	12%	✓	✓
Fluorine	NSW TM-9	ALS Method QWI-EN/EA144C & Ektimo 240	25%	✓	✓ [†]
Hydrogen chloride	NSW TM-8	Ektimo 235	14%	✓	✓ [†]
Solid particles (total)	NSW TM-15	NSW TM-15 ^{††}	5%	✓	✓
Particulate matter (PM ₁₀)	NSW OM-5	NSW OM-5 ^{††}	6%	✓	✓
Sulfuric acid mist and/or sulfur trioxide	NSW TM-3	Ektimo 235	16%	✓	✓ [†]

200124

* Uncertainty values cited in this table are calculated at the 95% confidence level (coverage factor = 2)

[†] Analysis conducted at the Ektimo Mitcham, VIC laboratory, NATA accreditation number 14601. Results were reported on
12 April 2021 in report number LV-001303.
16 April 2021 in report number LV-001313.
21 April 2021 in report number R010542-ISE F.

^{††} Gravimetric analysis conducted at the Ektimo Unanderra, NSW laboratory, NATA accreditation number 14601.

[#] Analysis (solid fluoride only) performed by Australian Laboratory Services Pty Ltd, NATA accreditation number 825. Results were reported to Ektimo on 26 April 2021 in report number EN2103091.

6 QUALITY ASSURANCE/QUALITY CONTROL INFORMATION

Ektimo is accredited by the National Association of Testing Authorities (NATA) for the sampling and analysis of air pollutants from industrial sources. Unless otherwise stated test methods used are accredited with the National Association of Testing Authorities. For full details, search for Ektimo at NATA's website www.nata.com.au.

Ektimo is accredited by NATA (National Association of Testing Authorities) to ISO/IEC 17025 - Testing. ISO/IEC 17025 - Testing requires that a laboratory have adequate equipment to perform the testing, as well as laboratory personnel with the competence to perform the testing. This quality assurance system is administered and maintained by the Quality Director.

NATA is a member of APLAC (Asia Pacific Laboratory Accreditation Co-operation) and of ILAC (International Laboratory Accreditation Co-operation). Through the mutual recognition arrangements with both of these organisations, NATA accreditation is recognised worldwide.

7 DEFINITIONS

The following symbols and abbreviations may be used in this test report:

% v/v	Volume to volume ratio, dry or wet basis
~	Approximately
<	Less than
>	Greater than
≥	Greater than or equal to
APHA	American public health association, Standard Methods for the Examination of Water and Waste Water
AS	Australian Standard
BSP	British standard pipe
CARB	Californian Air Resources Board
CEM	Continuous Emission Monitoring
CEMS	Continuous Emission Monitoring System
CTM	Conditional test method
D	Duct diameter or equivalent duct diameter for rectangular ducts
D ₅₀	'Cut size' of a cyclone defined as the particle diameter at which the cyclone achieves a 50% collection efficiency ie. half of the particles are retained by the cyclone and half are not and pass through it to the next stage. The D ₅₀ method simplifies the capture efficiency distribution by assuming that a given cyclone stage captures all of the particles with a diameter equal to or greater than the D ₅₀ of that cyclone and less than the D ₅₀ of the preceding cyclone.
DECC	Department of Environment & Climate Change (NSW)
Disturbance	A flow obstruction or instability in the direction of the flow which may impede accurate flow determination. This includes centrifugal fans, axial fans, partially closed or closed dampers, louvres, bends, connections, junctions, direction changes or changes in pipe diameter.
DWER	Department of Water and Environmental Regulation (WA)
DEHP	Department of Environment and Heritage Protection (QLD)
EPA	Environment Protection Authority
FTIR	Fourier Transform Infra-red
ISC	Intersociety committee, Methods of Air Sampling and Analysis
ISO	International Organisation for Standardisation
Lower Bound	Defines values reported below detection as equal to zero.
Medium Bound	Defines values reported below detection are equal to half the detection limit.
NA	Not applicable
NATA	National Association of Testing Authorities
NIOSH	National Institute of Occupational Safety and Health
NT	Not tested or results not required
OM	Other approved method
OU	The number of odour units per unit of volume. The numerical value of the odour concentration is equal to the number of dilutions to arrive at the odour threshold (50% panel response).
PM ₁₀	Atmospheric suspended particulate matter having an equivalent aerodynamic diameter of less than approximately 10 microns (µm).
PM _{2.5}	Atmospheric suspended particulate matter having an equivalent aerodynamic diameter of less than approximately 2.5 microns (µm).
PSA	Particle size analysis
RATA	Relative Accuracy Test Audit
Semi-quantified VOCs	Unknown VOCs (those not matching a standard compound), are identified by matching the mass spectrum of the chromatographic peak to the NIST Standard Reference Database (version 14.0), with a match quality exceeding 70%. An estimated concentration will be determined by matching the integrated area of the peak with the nearest suitable compound in the analytical calibration standard mixture.
STP	Standard temperature and pressure. Gas volumes and concentrations are expressed on a dry basis at 0°C, at discharge oxygen concentration and an absolute pressure of 101.325 kPa, unless otherwise specified.
TM	Test Method
TOC	The sum of all compounds of carbon which contain at least one carbon to carbon bond, plus methane and its derivatives.
USEPA	United States Environmental Protection Agency
VDI	Verein Deutscher Ingenieure (Association of German Engineers)
Velocity Difference	The percentage difference between the average of initial flows and afterflows.
Vic EPA	Victorian Environment Protection Authority
VOC	Any chemical compound based on carbon with a vapour pressure of at least 0.010 kPa at 25°C or having a corresponding volatility under the particular conditions of use. These compounds may contain oxygen, nitrogen and other elements, but specifically excluded are carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and carbonate salts.
XRD	X-ray Diffractometry
Upper Bound	Defines values reported below detection are equal to the detection limit.
95% confidence interval	Range of values that contains the true result with 95% certainty. This means there is a 5% risk that the true result is outside this range.

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7 Redland Drive
Mitcham VIC 3132

Postal Address
52 Cooper Road
Cockburn Central WA 6164

Office Locations
VIC NSW WA QLD

Freecall: 1300 364 005
www.ektimo.com.au
ABN 86 600 381 413

Appendix L

Community Consultation

Trinit 3, 39 Delhi Road, North Ryde, NSW 2113
Locked Bag 1345, North Ryde, BC 1670
T 61 2 9235 8000
F 61 2 8362 9005
ABN 68 168 794 821



Project:	PGH Bricks Bringelly brickworks extension
Meeting No:	9
Date:	23 April 2020
Venue and Time:	Via Zoom due to Covid 19 pandemic – 4-5pm
Document:	Meeting notes
Chair/Facilitator:	Kath Elliott, (KE)
Minutes:	Kath Elliott
PGH representatives:	Tony West, Plant Manager, PGH Bricks Bringelly Debbie Cook, National Work Health, Safety and Environment Manager Tony Hunt, Environmental Manager
Committee Members:	
	Diane Newell, Neighbour
	Sharyl Scott, Principal, Bringelly Public School
	Dam Truong, Neighbour
Apologies:	
	Michelle Pickering, Neighbour
	Renate, neighbour
	Tony Estephan, Neighbour

Meeting Minutes

Welcome

Kath Elliott (KE) welcomed members and provided an overview of the meeting agenda.

Apologies were noted.

Minutes

The minutes of September 2019 were accepted as a true and accurate record.

<p>Matters arising</p> <p>Chair to invite the president of the Bringelly Public School P&C to join the committee .</p> <p>PGH to re-send a link to the Traffic Management Plan to Sharyl Scott, Principal of Bringelly Public School</p> <p>Project status update – Tony West</p> <p>Tony advised that:</p> <ul style="list-style-type: none"> • A high volume sampler has been installed and is used to collect TSP samples. The high volume air sampler draws a large known volume of air through a pre-weighed filter for 24 hours. • A weighbridge has been installed, and commissioning is being undertaken. • Bund survey work has commenced. This includes the construction of a 4.5 metre high noise bund along the northern boundary of the quarry operations (362 metres long x 3 metre flat top with 21 metres wide base and 1:2 batter slopes). • There was an EPA inspection to check on a crack in the concrete near the diesel filling area which could cause oil to leak into the ground. No leak was discovered. • There may be a shut down over the next few months if there is a downturn in the market. <p>Approval update – Debbie Cook</p> <p>Prior to the bricks business being purchase by CSR in November 2016, the Bringelly site was subject to a State Significant Development (SSD 5684) approval.</p> <p>PGH commenced development under the Project Approval on 24 February 2020 by carrying out surveying works for the construction of a noise bund at the site.</p> <p><u>Current status of Bringelly Management Plans:</u></p> <p>The following Management Plans have been approved and are available on PGH Website:</p> <ul style="list-style-type: none"> • Noise Management Plan • Air Quality Management Plan • Traffic Management Plan • Surface and Ground Water Management Plans • Heritage Management Plan • Environmental Management Strategy <p>The plans listed below were submitted to the Department 12 December 2019:</p> <ul style="list-style-type: none"> • Biodiversity Management Plan. 	<p>Kath Elliott</p> <p>Debbie Cook</p> <p>A diagram showing the bund wall location to be provided to the committee members via the Chair</p>
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- Rehabilitation Management Plan

Environmental Performance

PGH provided dust monitoring results since the last meeting, noting that there had been spikes in dust during the recent bushfires. They advised that apart from these spikes, dust monitoring showed that the plant was within EPA guidelines.

There was one notifiable incident being an overflow during a rainfall event. The discharge was caused by a heavy rainfall event over the period 7-10 February, with 312mm of rainfall recorded over the four days at the nearest BOM weather station (Bringelly/Maryland). This significantly exceeds a 90th percentile rainfall event (>50mm over a consecutive five-day period) as defined by the EPA.

The event was reported to the EPA immediately (references CO1795-2020 and CO1826-2020).

Samples were taken from the overflowing dams and from the creek downstream that was receiving the overflow and sent for analysis.

Water was pumped from Dam 5 and Dam 1 to the quarry pit to relieve overflow pressure.

Dam 4 was cleaned out late last year during the extended dry weather and now has substantially increased capacity to manage runoff from major rainfall events.

An application will be lodged to vary EPL 1818 to include a stipulation that the concentration limits for water parameters are not applicable to overflow events that occur during a 90th percentile rainfall event. This stipulation is already in place in the EPL for Cecil Park and the EPA has verbally agreed that all licenses should be consistent in this respect.

Sharyl Scott advised that the Bringelly PS was advised of a dam being close to overflowing at the time.

Debbie Cook advised that when the dams overflow, they typically flow into the nearby creek but that the dams have been maintained well and designed not to overflow. Tony Hunt advised that the volume of rain at the time meant that the creek was overwhelmed.

Q. Where is the operational boundary of the plant?

A. The boundary is south of the Boral batching plant.

Q. Has the bund wall been started yet?

A. Not yet.

General business

There was no general business. Meeting closed at 5.00 pm

Next meeting

Thursday September 24, 2020 at 4.30pm.

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Project:	PGH Bricks Bringelly brickworks extension
Meeting No:	10
Date:	April 2020
Venue and Time:	Bringelly Community Hall 4-5pm
Document:	Meeting notes
Chair/Facilitator:	Kath Elliott, (KE)
Minutes:	Kath Elliott
PGH representatives:	Tony West, Plant Manager, PGH Bricks Bringelly Debbie Cook, National Work Health, Safety and Environment Manager
Committee Members:	Diane Newell, Neighbour Sharyl Scott, Principal, Bringelly Public School Dam Truong, Neighbour
Apologies:	Tony Hunt, Environmental Manager Michelle Pickering, Neighbour Tony Estephan, Neighbour Rino Di Mascio, P&C President, Bringelly PS

Meeting Minutes

Welcome

Kath Elliott (KE) welcomed members and provided an overview of the meeting agenda. Members were reminded to be Covid safe and the meeting observed NSW social distancing rules.

Apologies were noted.

Minutes

The minutes of April 2020 were accepted as a true and accurate record.

Matters arising

It was noted that the Chair I(on behalf of the committee) had invited Rino Di Mascio, President of the Bringelly Public School P&C to join the committee and he had accepted.

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<p>The Committee requested that the chair reach out to members not attending to see if they were still interested in continuing on the committee.</p> <p>PGH had sent the link to the Traffic Management Plan to Sharyl Scott, Principal of Bringelly Public School</p> <p>A diagram showing the bund wall location had been provided to the committee members via the Chair</p> <p>Approvals update – Debbie Cook</p> <p>Debbie provided an overview of the wider business:</p> <p>PGH will be closing the Horsley Park brickworks – which has been producing sandstock bricks. Production will cease in March 2021.</p> <p>The property will be sold due to its high value.</p> <p>The Schofields plant and the Bringelly and Cecil Park plants will continue to operate.</p> <p>Bringelly Approvals</p> <p>Debbie advised that the company would not be excavating in new cell areas on the site until 2021.</p> <p>The weighbridge is assessing the number of trucks to identify the portion of royalties that needs to be paid to Camden Council by 31 December 2020.</p> <p>Tonnages will be presented to the Department of Planning Industry and Environment (DPIE)</p> <p><u>Current status of Bringelly Management Plans:</u></p> <p>The only two management plans that have not been triggered as yet (until the company excavates new cells) are the biodiversity and rehabilitation management plans.</p> <p>All other plans have been approved and are in place.</p> <p>PGH is introducing a community complaints line and this will be provided on a leaflet to local neighbours as well as on the sign at the entrance to the plant. The leaflet will be letterboxed in the local area soon.</p> <p>Debbie advised that this system had been working well recently at other PGH plants and provides the community with direct and quick access to staff to address issues.</p> <p>Project status update and Environmental Performance</p> <p>There have been no environmental notifiable incidents in the period.</p> <p>Tony West presented the dust results (see in attached PowerPoint presentation) and advised that all results were below allowable limits. The results provide a 12 month rolling average.</p> <p>It was noted that the bushfires had impacted dust results.</p>	<p>Kath Elliott</p>
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Tony advised that the 24 hr high volume dust monitoring had shown some inconsistent results, so the company was having this equipment checked to ensure reliability.

EPA visited the site on August 17, 2020 and did not identify any issues of concern.

The company is now focusing on water management. During the period, the company dug out a dam and de-silted it to increase capacity. The EPA were supportive of that approach in their visit.

Q. Did PGH water overflow contribute to the floods earlier this year?

A. There was three weeks of rain which was an extraordinary rain event and it was not possible to hold all the water on site in that case. EPA did not issue non-conformance given the circumstances. Dams on site are designed to hold water in 1/10yr and 1/100yr events. Any overflow from dams would go across the grassed area and into the creek.

Q. Has PGH connected into the mains water that Boral has facilitated next door?

A: PGH is already connected to mains water and is looking at recycling options for our dam water and have a goal to reduce potable water use by 20% by 2030.

The company is looking across the business at environmental initiatives including a range of options such as pasteurising organic matter and feeding it into brick material, the use of biomass, and improving its sustainability in general through circular economy, partnerships and beneficial re-use.

Q: Are you reducing your carbon footprint – as brickmaking uses a lot of energy?

A: PGH already re-use brick material which reduces energy use, with a very low brick reject rate of .2%. The company has replaced lighting to reduce energy consumption and note that a south Australian brick plant has implemented solar. Closing Horsley Park has reduced the company's carbon footprint. PGH has introduced sustainability as a strategic pillar which will improve its implementation across the business.

PGH is also re-using water on site for dust suppression and looking at re-using it in processing.

Debbie also advised that the new PGH CEO is focusing on sustainability and the business has been restructured.

General business

Ms Scott advised on the bushfire process for Bringelly School which included emergency evacuation procedures by bus, and RFS to have a truck and command centre at the school. Bringelly PS has been classed as a Category 2 school in terms of bushfire risk. The Principal has been provided with a bushfire APP to assist in communication in the event of bushfire.

Discussion ensued on the drop off point at Bringelly Public School on Greendale Rd being moved around the corner onto the old northern road

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(now Wentworth Rd) which, since completion of road works, is now a dead end but has <i>no stopping</i> signs along its length. PGH offered to assist through its government relations staff to see if assistance could be provided in achieving this with RMS. The Chair also offered to assist. Meeting closed at 5.00 pm	Debbie Cook
Next meeting Thursday May 6, 2021 at 4- 5.30pm.	

DRAFT

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Project:	PGH Bricks Bringelly brickworks extension
Meeting No:	12
Date:	16 June 2021
Venue and Time:	Bringelly Community Hall 3-4.30pm
Document:	Meeting notes
Chair/Facilitator:	Kath Elliott, (KE)
Minutes:	Kath Elliott
PGH representatives:	Tony West, Plant Manager, PGH Bricks Bringelly Debbie Cook, National Work Health, Safety and Environment Manager Tony Hunt, Environment Manager Nelma Arancibia, Property Manager Michael Travers, Project Manager
Committee Members:	Diane Newell, Neighbour Rino Di Mascio, P&C President, Bringelly PS Dam Truong, Neighbour
Apologies:	Michelle Pickering, Neighbour, leave of absence Tony Estephan, Neighbour Sharyl Scott, Principal, Bringelly Public School

Meeting Minutes

<p>Welcome</p> <p>Kath Elliott (KE) welcomed members and in particular new member Rino Di Mascio. Members were reminded to be Covid safe and the meeting observed NSW social distancing rules.</p> <p>Members endorsed a leave of absence granted to Michelle Pickering and extended best wishes to her.</p> <p>Apologies were noted.</p> <p>Minutes</p>	
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<p>The minutes of October 2020 were accepted as a true and accurate record.</p> <p>Matters arising</p> <p>It was agreed to provide a leave of absence to Michelle Pickering.</p> <p>It was noted there was a need for new members of the committee. Agreed that the chair was to undertake recruitment in line with consent conditions and protocols.</p> <p>Members discussed calling for more nominations for the CCC.</p> <p>Agreed to advertised for two more members</p> <p>Project status update – Tony West</p> <p>PGH will introduce a community complaints line. A letterbox drop will be undertaken and the contact number will be promoted on signage by PGH.</p> <p>Truck records are being logged and kept.</p> <p>Independent Environmental Audit has been completed.</p> <p>Production figures have been forwarded to authorities.</p> <p>The biodiversity and rehabilitation management plans have been submitted to DPIE aligning with timing of triggers.</p> <p>PGH further investigating using recycled water from dam in brickmaking.</p> <p>EPA will visit in August 2021 to do inspection.</p> <p>Independent audit summary of findings</p> <p>During the period an independent environmental audit was conducted.</p> <p>66 criteria were assessed.</p> <p>43 criteria were compliant</p> <p>15 were not applicable to Bringelly brickworks</p> <p>8 non-compliances several of the non-compliant findings were administrative.</p> <p>None of the non-compliance findings resulted in material harm to the community or environment.</p> <p>One was a truck exceedance- too many trucks entering and exiting in one day, noting this was related to a one-off event of a large relocation of inventory, exacerbated by truck scheduling, and impacted by wet weather in preceding weeks.</p> <p>Q: What constitutes a “truck”?</p> <p>A: Anything over 4.5 tonnes .</p> <p>Environmental Performance</p> <p>2020/21 results were below maximum deposited dust levels.</p>	<p>Kath Elliott</p>
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Exploration licence

Michael gave an overview of PGH's application for an exploration licence over the Bringelly brickwork site. The exploration licence was previously owned by Austral.

The exploration licence does not allow PGH to mine but will provide protection of the resource which is known as Bringelly Shale in and around our current mining lease.

Q: Are PGH going to get a licence over the area at Bradfield near the new airport?

A: No, there is no intention of a licence over the airport nor taking material from the construction at that site.

Q: How deep does the clay go?

A: About 40m. Bringelly brickworks has a mining licence to 36m only. Noted that there is 20 years of supply on the Bringelly site.

Q: Will you be exploring further down or in a new area on the site?

A: The licence will help us to understand what is in the area but can only be done with the existing landowner's consent. We cannot mine below our mining licence depths.

CSR Network Optimisation

Nelma gave an overview about CSR optimisations and advised that there are pressures on factories from urban encroachment. This has happened around the airport where there is additional pressure for airport related businesses.

As a result, PGH is expecting to close the Schofields plant in the future releasing land for residential development and is seeking to consolidate manufacturing at the Bringelly site, increasing production at Bringelly by 25%.

PGH has also closed Horsley Park.

Nelma said that a project scoping report for the consolidated plant would be presented to DPIE within two weeks.

Q: How will this affect truck movements?

The hourly rate for tucks will increase however the commitment to 18 trucks per hour during school peak times will be retained.

It was noted that the phasing of the lights at the intersection near the school is favouring Greendale Rd, which has exacerbated the issues of trucks maintaining high speed near the school has been exacerbated as they don't have to slow down for the lights as often. Noted that it is not just PGH related trucks.

Q: Can you reduce truck numbers during peak school pickup and drop off periods?

A: We anticipate that we will stay within 18 trucks per hour at peak school pick up and drop off times.

Q: Are you strict on bad driver behaviour ?

Kath
Elliott to

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<p>A: Yes, we can ban drivers and companies. We have a Code of Conduct, a complaints line and we can conduct investigations into behaviours. We also have some tracking devices on some trucks.</p> <p>Q: What hours do trucks arrive and depart?</p> <p>A: The hours are between 6am and 6pm. Most trucks must leave the site by 8am. The majority are metro deliveries and return to the yard as scheduled throughout the day to pick up bricks, Then some drift back later.</p> <p>Q: When will the entry be realigned?</p> <p>A: When changes in volume occur with the amalgamation of plants. We are discussing this with DPIE at present. The change in the location will be closer to the school which will mean that trucks will be slower near the school as they accelerate and decelerate,</p> <p>Discussion ensued regarding the safety issues near the Bringelly Public School.</p> <p>Suggestions included contacting RMS to remove the no stopping signs, installing speed humps, writing to Camden Council to request a meeting, installing speed cameras, new fencing etc,</p> <p>Meeting agreed to write to Camden Council to request a meeting with CCC to discuss the issues and options.</p>	<p>draft letter</p>
<p>General business</p> <p>Meeting closed at 4.30 pm</p>	
<p>Next meeting</p> <p>Thursday November 11, 2021, at 4- 5.30pm.</p>	

Appendix M

Approval to Change ARR period

Tara O'Brien

From: Resources Regulator <nswresourcesregulator@service-now.com>
Sent: Friday, 15 January 2021 11:51 AM
To: Gauci, Joe
Cc: Sinead Kelly; resource.operations@planning.nsw.gov.au; Whitney.Reeves@planning.nsw.gov.au; greg.kininmonth@planning.nsw.gov.au
Subject: AREQ0014647 | ML1731 - Request to change ARR reporting period/ due date - PGH Bricks & Pavers Pty Ltd - Approved

Dear Joe

I refer to your letter to Mining, Exploration and Geoscience, dated and submitted 11 January 2021, requesting a change in the Annual Rehabilitation Report (ARR) reporting period and due date for Mining Lease (ML) 1731 – Bringelly Clay Mine (Our Reference – AREQ0014647).

The relevant condition of ML1731 is Condition 3(f) (Annual Rehabilitation Report).

It is noted that the requested change in Annual Reporting is consistent with current timeframes for Annual Review reporting to the Department of Planning, Industry and Environment.

Under delegation given to me, the submission date for Annual Rehabilitation Reports for Mining Lease 1731 (Bringelly Clay Mine) is changed from 28 February to **30 September** each year.

The reporting period will change from a calendar year to a financial year (**1 July to 30 June**).

Please note that due to the change in reporting period, the next ARR will be required to cover an 18 month period (1 January 2020 to 30 June 2021), with subsequent reports covering a financial year period.

Annual Rehabilitation Report are currently to be submitted to the Resources Regulator email address nswresourcesregulator@service-now.com

If you require further information regarding this issue please feel free to contact me directly.

Regards,

Greg Kininmonth
Manager Environmental Operations
MAI - Team 1 | Resources Regulator
T 02 42767428 M 0429 168 021

Signed Under Delegation from the Minister



**Regional
NSW**

Appendix N

Resource Regulator

TAP

PGH Bricks & Pavers Pty Ltd
59-67 Cecil Road
Cecil Park NSW 2178
Attn: Joe Gauci

By email: jgauci@pghbricks.com.au

Dear Joe Gauci

Bringelly Clay Mine

Targeted Assessment Program – Landform Establishment

Overview

The NSW Resources Regulator within the Department of Regional NSW (the Regulator) is responsible for the administration and enforcement of the *Mining Act 1992* (the Act) and associated Regulations.

Our compliance and enforcement strategy involves targeted assessment programs (TAPs) at mines across NSW. TAPs have been developed to focus on [critical controls](#) across mine sites to ensure measures have been identified and implemented to facilitate sustainable rehabilitation outcomes. One of the primary aims of the TAP is to assist industry with continual improvement in rehabilitation outcomes.

Further information regarding our approach to conducting a TAPs can be found at <https://www.resourcesregulator.nsw.gov.au/environment/compliance>.

Scope of assessment

On 15 April 2021, a TAP was conducted at the Bringelly Clay Mine (the mine).

The assessment focused on how the final approved landform is being established to achieve sustainable rehabilitation outcomes. This includes management of any problematic waste material that requires containment within the rehabilitated landform.

The entire mine complex was not inspected and as such the observations outlined below do not reflect compliance or otherwise with the Act, the *Mining Regulation 2016*, the conditions of authorisation or relevant approvals granted by the Department.

Observations

Based on discussions held with the mine staff, documents presented and field inspections undertaken as part of the assessment, the following key observations were noted by the Regulator:

- Risk Assessment - The mine has not adequately identified the range of risks associated with landform establishment and appropriate controls are not in

place to facilitate sustainable rehabilitation outcomes. In particular it was observed that the risk assessment in the MOP did not adequately identify controls for managing low pH materials which may affect the final landuse outcome.

- Waste material characterisation - whilst no final landform work has yet been conducted, it was unclear how ongoing waste and soil material characterisation is undertaken. Although some previous soil testing data may be available, there does not appear to be a characterisation program in place for waste and soil materials as they become available.
- Final landform design - the Resources Regulator notes that the conceptual final landform outlined in the approved Bringelly Development Consent may not be reflective of a suitable and contemporary final land use outcome for this area. It is also noted that Condition 25 of the Bringelly Development Consent requires the regular revision and submission of a Final Land Use Options Plan (FLUOP) in consultation with the Resources Regulator (formerly DRE).

Recommendations

In transitioning to the Operational Rehabilitation Reforms and as part of preparing the associated documentation required by the proposed regulation, it is the expectation of the Resources Regulator that a program will be developed to address the recommendations below:

1. Undertake a revised risk assessment to identify all risk and risk controls (treatments) associated with mine rehabilitation and closure. The risk assessment should include information on how control effectiveness is assessed, and how updates to the risk assessment are undertaken as a result. The risk assessment needs to be specific to actual causes and controls used rather than listing management plans only. The risk assessment should include input from a suitably qualified team of appropriately skilled people representing a cross-section of the workforce and activities undertaken at the mine. It is recommended that a suitably qualified landform design specialist is involved in the next rehabilitation risk assessment review process. Guidance on the range of risks to consider can be found on the Regulator's website (<https://www.resourcesregulator.nsw.gov.au/environment/compliance/regulating-risks-to-rehabilitation>)
2. Material characterisation practices should be reviewed to ensure an adequate understanding of the geochemical properties of waste material so that specialist handling and management is implemented at extraction and/or processing. The mine should also undertake regular testing of all waste and soil materials to confirm their geochemical properties. Triggers at which specialist handling and management practices are required, are to be clearly defined. These requirements should be formalised in an appropriate management plan.
3. The Resources Regulator would encourage PGH to engage regularly with DPIE and the Regulator during the development of the FLUOP to ensure appropriate options are identified to assist and direct the final rehabilitation effort.

The implementation of the program to address these recommendations will be subject to future Targeted Assessment Programs assessments and other periodic assessments undertaken by the Regulator.

Inspection Comment

During the site inspection, two (2) significant tunnel erosion areas were observed on the western side of the pit shell. These areas appear to be the location of concentrated water flow from off-site inflows as well as on-site sources. Whilst it was observed that sediment was being captured in-pit, these erosion areas have the potential to 'cut-back' and de-stabilise the upper pit shell and affect the soil resource in advance of the current mining area.

It is recommended that PGH conduct a review of the surface water management in this area and determine the cause of this ongoing problem. A suitable remedial action plan should be developed in consultation with neighbouring properties to ensure excessive water ponding and/or rapid water movement in this area is reduced, controlled or eliminated.

Compliance monitoring

You should note that the Regulator intends to actively monitor and enforce rehabilitation obligations at the mine. Further information regarding mine rehabilitation obligations is available at <http://www.resourcesregulator.nsw.gov.au>.

If you require additional information, please contact the Resources Regulator on 1300 814 609 or via email at nswresourcesregulator@service-now.com.

Yours sincerely,

Greg Kininmonth
Manager Environmental Operations
Resources Regulator

7 May 2021

Appendix O

Noise Monitoring

Noise Monitoring Assessment

PGH Bricks Bringelly
Bringelly, NSW



Document Information

Noise Monitoring Assessment

PGH Bricks Bringelly

Bringelly, NSW

Prepared for: PGH Bricks Pty Ltd

Greendale Road

Bringelly NSW 2256



Prepared by: Muller Acoustic Consulting Pty Ltd

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DOCUMENT ID	STATUS	DATE	PREPARED	SIGNED	REVIEWED	SIGNED
MAC190946-02RP1	Final	16 December 2020	Rod Linnett		Oliver Muller	

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1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has been commissioned by PGH Bricks Pty Ltd (PGH) to complete a Noise Monitoring Assessment (NMA) for the PGH Bringelly Brickworks (the 'site') at Greendale Road, Bringelly, NSW.

This assessment has been undertaken for the quarterly period ending December 2020, and forms part of the annual noise monitoring program to address conditions outlined in the Development Consent.

The NMA has quantified potential operational and sleep disturbance noise emissions from the operation and has been conducted in accordance with the following documents:

- NSW Environment Protection Authority (EPA), Noise Policy for Industry (NPI), 2017;
- Bringelly Brickworks Noise Management Plan (NMP ref BRK-BRI-NMP Version 4 dated 12.02.19), 2019;
- Bringelly Brickworks Development Consent, 2015 (SSD_5684); and
- Australian Standard AS 1055:2018 - Acoustics - Description and measurement of environmental noise.

A glossary of terms, definitions and abbreviations used in this report is provided in **Appendix A**.

The Development Consent is provided in **Appendix B**.

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2 Noise Criteria

The Bringelly Brickworks NMP outlines the applicable noise criteria for representative residential receivers surrounding the site and are presented in **Table 1**. The site includes the operation of a quarry and brickmaking plant, and as the quarry operates during the daytime, there are separate criteria relating to each period.

Table 1 Noise Criteria ¹				
Activity	Receiver	Day/Evening/Shoulder ^{2,3}	Night ²	
		dB LAeq(15min)	dB LAeq(15min)	dB LA1(max) ³
Brickmaking and quarrying	R1, R2	47	N/A	
	R3, R4, R14	46		
	R15, R17	45		
	All other receivers	44		
Brickmaking	All Receivers	44	43	53

Note 1: Noise criteria adopted from the Development Consent.

Note 2: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

Note 3: Periods and parameters as expressed in the Development Consent

Figure 1 presents the identified receiver locations and representative measurement locations.

Section 4 of the Bringelly Brickworks Development Consent, 2015 (SSD_5684) outlines requirements for Noise Bunds adjacent to the northern boundary of the extraction area and adjacent to Greendale Road. It is noted that the proposed new access road and associated noise bund adjacent to Greendale Road are not in place at the time of the monitoring. Further details on review of noise mitigation measures for the site are contained in a historic report (MAC190946LR1, 29 September 2019).



FIGURE 1
SITE LAYOUT
MAC190946-02
PGH Bringelly Brickworks

KEY

- Monitoring Locations
- Receivers



3 Assessment Methodology

The attended noise measurements were conducted in general accordance with the procedures described in Australian Standard AS 1055:2018, "Acoustics - Description and Measurement of Environmental Noise". Measurements were conducted using a Svantek Type 1, 971 noise analyser. The acoustic instrumentation used carries current NATA calibration and complies with AS IEC 61672.1-2019- Electroacoustics - Sound level meters - Specifications. Calibration of all instrumentation was checked prior to and following measurements. Drift in calibration did not exceed $\pm 0.5\text{dBA}$.

Noise measurements were of 15-minutes in duration and where possible, throughout each survey the operator quantified the contribution of each significant noise source. Measurements were conducted at five locations (N1, N3, N14, N20, N35) on Tuesday 8 December 2020, during the daytime, evening and night time periods to satisfy the requirements of the NMP.

Extraneous noise sources were excluded from the analysis to determine the $L_{Aeq}(15\text{min})$ quarry noise contribution for comparison against the relevant criteria. In the event of site attributed noise being above criteria, prevailing meteorological conditions for the monitoring period are analysed in accordance with Fact Sheet D of the NPI to determine the stability category present at the time of each attended measurement.

Where the site is inaudible, the contribution is estimated to be at least 10dBA below the ambient noise level.

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4 Results

4.1 Assessment Results - Location N1

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N1 for the NMA are presented in **Table 2**.

Table 2 Operator-Attended Noise Survey Results – Location N1

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
08/12/2020	14:14 (Day)	61	49	46		Car passby 52-59
					WD: SW	Truck passby to 67
					WS: 1.5m/s	Plane 45-56/50-54/53-59
					Rain: Nil	Residential Noise 47-50
PGH not audible						
PGH Site LAeq(15min) Contribution						<35
08/12/2020	20:25 (Evening)	45	38	35	WD: N/A	Insects 34-37
					WS: <0.5m/s	Birds 36-38/40-44
					Rain: Nil	PGH audible ~34-38
					PGH Site LAeq(15min) Contribution	
08/12/2020	23:10 (Night)	47	41	39	WD: N/A	Insects 38-40
					WS: <0.5m/s	PGH audible ~36-40
					Rain: Nil	
					PGH Site LAeq(15min) Contribution	

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.2 Assessment Results - Location N3

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N3 for the NMA are presented in **Table 3**.

Table 3 Operator-Attended Noise Survey Results – Location N3

Date	Time (hrs)	Descriptor (dBA re 20 μPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
08/12/2020	13:47 (Day)	58	48	41	WD: SW WS: 1.5m/s Rain: Nil	Truck passby 48-53
						Distant traffic 40-41
						Birds 40-45
						Plane 47-51/56-58
						Truck entering PGH 40-42 (2-3sec)
PGH Site LAeq(15min) Contribution						<35
08/12/2020	20:49 (Evening)	55	44	37	WD: N/A WS: <0.5m/s Rain: Nil	Insects 35-37
						Dog bark distant 40-42
						Car passby 40-49
						Distant traffic 39-40
						PGH audible ~37-38
PGH Site LAeq(15min) Contribution						<34
08/12/2020	22:47 (Night)	51	44	39	WD: N/A WS: <0.5m/s Rain: Nil	Insects 40-45
						PGH audible ~38-40
PGH Site LAeq(15min) Contribution						36

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.3 Assessment Results - Location N14

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N14 for the NMA are presented in **Table 4**. **Error! Reference source not found..**

Table 4 Operator-Attended Noise Survey Results – Location N14

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
08/12/2020	15:03 (Day)	72	58	42	WD: SW	Car passbys 44-62
					WS: 1.5m/s	Truck passby 52-64
					Rain: Nil	Plane 44-47
						Truck at PGH weighbridge
						60-72 (20sec)
PGH Site LAeq(15min) Contribution						<40
08/12/2020	21:14 (Evening)	67	54	36	WD: N/A	Insects 35-37
					WS: <0.5m/s	Motorcycle 40-44
					Rain: Nil	Car passby 58-73
						Truck passby 60-71
						PGH audible ~34-36
PGH Site LAeq(15min) Contribution						<35
08/12/2020	22:27 (Night)	57	45	33	WD: N/A	Insects 33-35
					WS: <0.5m/s	Truck passby 60
					Rain: Nil	Car passby 62-63
						PGH just audible ~33-35
PGH Site LAeq(15min) Contribution						<35

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.4 Assessment Results - Location N20

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N20 for the NMA are presented in **Table 5**.

Table 5 Operator-Attended Noise Survey Results – Location N20

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
08/12/2020	14:42 (Day)	77	64	39	WD: SW	Car passbys 67-77
					WS: 1.5m/s	Truck passby 79
					Rain: Nil	PGH not audible
					PGH Site LAeq(15min) Contribution	
						<35
08/12/2020	21:34 (Evening)	72	58	33	WD: N/A	Insects 31-35
					WS: <0.5m/s	Dog bark distant 36-37
					Rain: Nil	Plane 45
						Car passby 45-70
						PGH not audible
					PGH Site LAeq(15min) Contribution	
						<35
08/12/2020	22:05 (Night)	75	62	33	WD: N/A	Insects 30-35
					WS: <0.5m/s	Plane 45
					Rain: Nil	Car passby 45-77
						PGH not audible
					PGH Site LAeq(15min) Contribution	
						<35

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.5 Assessment Results - Location N35

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N35 for the NMA are presented in **Table 6**.

Table 6 Operator-Attended Noise Survey Results – Location N35

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
08/12/2020	15:29 (Day)	48	41	36	WD: SW	Distant traffic <40
					WS: 1.5m/s	Birds 36-40
					Rain: Nil	PGH not audible
PGH Site LAeq(15min) Contribution						<35
08/12/2020	20:07 (Evening)	44	38	34	WD: N/A	Dog bark distant 39-42
					WS: <0.5m/s	Distant traffic 38-39
					Rain: Nil	PGH not audible
PGH Site LAeq(15min) Contribution						<35
08/12/2020	23:33 (Night)	50	38	30	WD: N/A	Dog bark distant 40-49
					WS: <0.5m/s	Insects 31-33
					Rain: Nil	Birds 38-43
PGH Site LAeq(15min) Contribution						PGH not audible
PGH Site LAeq(15min) Contribution						<35

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

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5 Discussion

Monitoring on Tuesday 8 December 2020 identified site noise was generally inaudible during the daytime at all monitoring locations, and just audible above ambient sources during the evening and night time periods at locations N1 and N3. Site attributable noise contributions were estimated to satisfy the relevant noise criteria at all locations during all assessment periods.

Audible site noise sources included the combustion fan, occasional rattle of forklift tines when travelling and trucks entering the site on the access road. Extraneous noise sources measured included insects, birds, traffic, aircraft and dogs barking.

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6 Conclusion

Muller Acoustic Consulting Pty Ltd (MAC) has completed a Noise Monitoring Assessment (NMA) for PGH Bricks Pty Ltd (PGH) at the Bringelly Brickworks (the 'site') at Greendale Road Bringelly, NSW. The assessment was completed to assess the site's compliance with the relevant noise criteria during Quarter 4, ending December 2020.

Attended noise monitoring was undertaken on Tuesday 8 December 2020 at five representative monitoring locations. The assessment has identified that noise emissions generated by Bringelly Brickworks were occasionally audible, however quarry noise emissions were below the relevant noise criteria throughout the survey period, satisfying the relevant consent conditions.

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Appendix A – Glossary of Terms

A number of technical terms have been used in this report and are explained in **Table A1**.

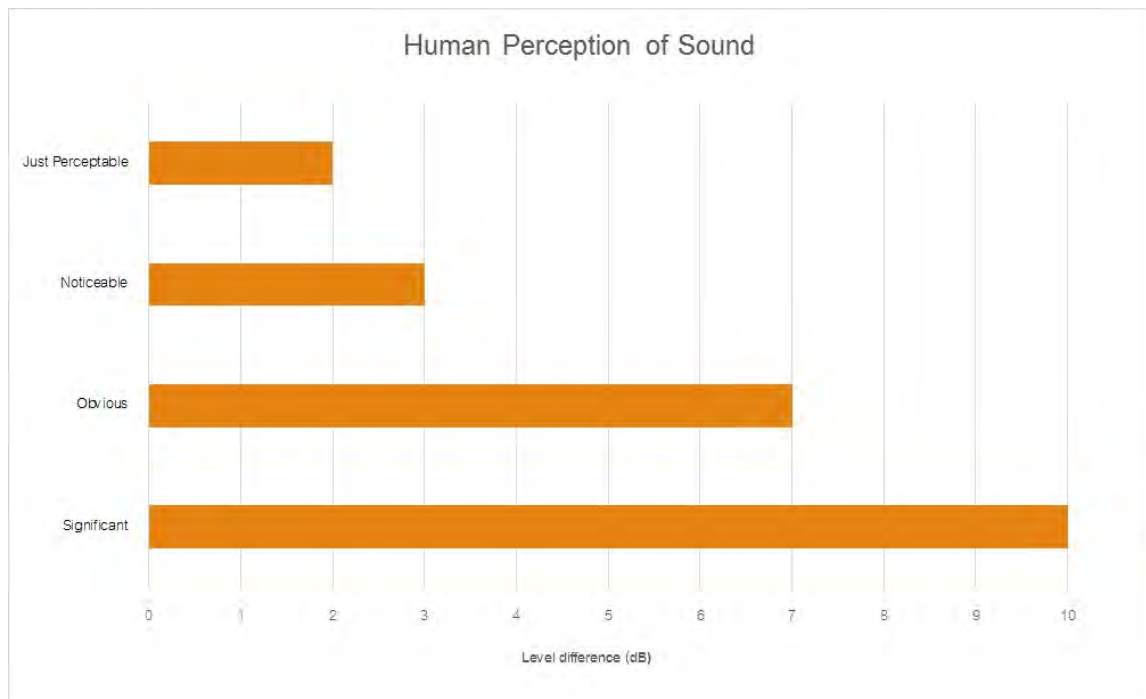
Table A1 Glossary of Acoustical Terms	
Term	Description
1/3 Octave	Single octave bands divided into three parts
Octave	A division of the frequency range into bands, the upper frequency limit of each band being twice the lower frequency limit.
ABL	Assessment Background Level (ABL) is defined in the NPI as a single figure background level for each assessment period (day, evening and night). It is the tenth percentile of the measured L90 statistical noise levels.
Ambient Noise	The total noise associated with a given environment. Typically, a composite of sounds from all sources located both near and far where no particular sound is dominant.
A Weighting	A standard weighting of the audible frequencies designed to reflect the response of the human ear to sound.
Background Noise	The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is usually represented by the LA90 descriptor
dBA	Noise is measured in units called decibels (dB). There are several scales for describing noise, the most common being the 'A-weighted' scale. This attempts to closely approximate the frequency response of the human ear.
dB(Z), dB(L)	Decibels Z-weighted or decibels Linear (unweighted).
Extraneous Noise	Sound resulting from activities that are not typical of the area.
Hertz (Hz)	The measure of frequency of sound wave oscillations per second - 1 oscillation per second equals 1 hertz.
LA10	A sound level which is exceeded 10% of the time.
LA90	Commonly referred to as the background noise, this is the level exceeded 90% of the time.
LAeq	Represents the average noise energy or equivalent sound pressure level over a given period.
LAmx	The maximum sound pressure level received at the microphone during a measuring interval.
Masking	The phenomenon of one sound interfering with the perception of another sound. For example, the interference of traffic noise with use of a public telephone on a busy street.
RBL	The Rating Background Level (RBL) as defined in the NPI, is an overall single figure representing the background level for each assessment period over the whole monitoring period. The RBL, as defined is the median of ABL values over the whole monitoring period.
Sound power level (Lw or SWL)	This is a measure of the total power radiated by a source in the form of sound and is given by $10 \cdot \log_{10} (W/W_0)$. Where W is the sound power in watts to the reference level of 10^{-12} watts.
Sound pressure level (Lp or SPL)	the level of sound pressure; as measured at a distance by a standard sound level meter. This differs from Lw in that it is the sound level at a receiver position as opposed to the sound 'intensity' of the source.

Table A2 provides a list of common noise sources and their typical sound level.

Table A2 Common Noise Sources and Their Typical Sound Pressure Levels (SPL), dBA

Source	Typical Sound Pressure Level
Threshold of pain	140
Jet engine	130
Hydraulic hammer	120
Chainsaw	110
Industrial workshop	100
Lawn-mower (operator position)	90
Heavy traffic (footpath)	80
Elevated speech	70
Typical conversation	60
Ambient suburban environment	40
Ambient rural environment	30
Bedroom (night with windows closed)	20
Threshold of hearing	0

Figure A1 – Human Perception of Sound



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Appendix B – Development Consent

Development Consent

Section 89E of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I approve the development application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

David Kitto
Executive Director
Resource Assessments and Business Systems

Sydney

2015

SCHEDULE 1

Application Number:

SSD_5684

Applicant:

Boral Bricks Pty Ltd

Consent Authority:

Minister for Planning

Land:

[Lot 100 in DP 1203966](#)

Development:

Bringelly Brickworks Extension Project

Modification 1 (October 2016 shown in [blue](#) text)

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DEFINITIONS

AHD	Australian Height Datum
Annual Review	The review required by condition 4 of schedule 5
Applicant	Boral Bricks Pty Ltd, or any other person or persons who rely on this consent to carry out the development that is subject to this consent
BCA	Building Code of Australia
Biodiversity offset strategy	The conservation and enhancement strategy described in the EIS, and shown conceptually in Appendix 4
Brick making operations	Includes the receipt, handling, processing, storage and transportation of raw materials on site, brick making on site and transportation of finished bricks on site
CCC	Community Consultative Committee
Conditions of consent	Conditions contained in schedules 1 to 5 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this consent
CPI	Australian Bureau of Statistics Consumer Price Index
Date of commencement	The date notified to the Department by the Applicant under condition 8 of Schedule 2
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment
Development	The development described in the documents of condition 2(a) of Schedule 2
Development area	All land to which the development application applies, as listed under "Land" in schedule 1 and shown in Appendix 1
DPI Water	Department of Primary Industries - Water
DRE	Division of Resources and Energy, within the NSW Department of Industry
EEC	Endangered Ecological Community, as defined under the <i>Threatened Species Conservation Act 1995</i>
EIS	Environmental Impact Statement titled <i>Bringelly Brickworks and Quarry Expansion</i> (2 volumes), dated September 2013, as modified by the Response to Submissions titled, <i>Bringelly Brickworks and Quarry Expansion, Response to Submissions</i> dated February 2014 and the letter entitled <i>Bringelly Brickworks – Biodiversity Offsets</i> , dated 2 June 2014
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6pm to 10pm
Extension area	The area outside of the existing quarry footprint (i.e. cells D, E, F, G, H and I, as shown conceptually in Appendix 2)
Feasible	Feasible relates to engineering considerations and what is practical to build
GDE	Groundwater Dependent Ecosystem
GPS	Global Positioning System
Growth Centres SEPP	<i>State Environmental Planning Policy (Sydney Regional Growth Centres) 2006</i>
Ha	Hectare
Incident	A set of circumstances that: <ul style="list-style-type: none"> causes or threatens to cause material harm to the environment; and/or breaches or exceeds the limits or performance measures/criteria in this consent
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedules 3 and 4 of this consent

	where it is defined to mean the whole of a lot, or contiguous lots, owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
m	Metres
Minister	Minister for Planning, or delegate
Mitigation	Activities associated with reducing the impacts of the development
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NP&W Act	<i>National Parks and Wildlife Act 1974</i>
OEH	NSW Office of Environment and Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or the Applicant (or its subsidiary)
Quarrying operations	Includes the removal of overburden and extraction, handling, storage and transportation of extractive materials on site
Raw materials	Raw materials imported for use in brick making including clay/shale and additives (such as manganese and iron oxides)
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, ensuring that it is safe, stable and non-polluting and appropriately revegetated
RMS	Roads and Maritime Services
Secretary	Secretary of the Department, or nominee
SEE (Mod 1)	Statement of Environmental Effects titled ' <i>Section 96(1A) Modification Supporting Information</i> ' dated August 2016 and prepared by Element Environment, including the Response to Submissions document dated September 2016
Site	The land listed under "Land" in schedule 1
Shoulder	The period between 6am to 7am on Monday to Saturday
South West Growth Centre	An area of land identified under the Growth Centres SEPP

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this consent, the Applicant **must** implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.

TERMS OF CONSENT

2. The Applicant **must**:
 - (a) carry out the development generally in accordance with the EIS **and SEE (Mod 1)**; and
 - (b) the conditions of this consent.

Note: The general layout of the development is shown in Appendix 2.

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
4. The Applicant **must** comply with any reasonable requirement/s of the Secretary arising the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent;
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; or
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

Quarrying and Brick Making Operations

5. The Applicant may carry out quarrying **operations** and brick making operations from the date of commencement of development under this consent until 1 March 2045.

Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.

Production Limits

6. The Applicant **must** not:
 - (a) extract more than 200,000 tonnes of clay/shale from the site in any calendar year;
 - (b) produce more than 263,500 tonnes of bricks at the site in any calendar year;
 - (c) carry out quarrying operations beyond 46 m AHD; and
 - (d) receive more than **321,000** tonnes of raw materials required for brick making to the site in any calendar year.

Transportation Limits

7. The Applicant **must** not:
 - (a) transport more than 263,500 tonnes of bricks from the site in a calendar year;
 - (b) receive more than 90 trucks to the site per day or more than 18 trucks per hour; and
 - (c) dispatch more than 90 trucks from the site per day or more than 18 trucks per hour.

NOTIFICATION OF COMMENCEMENT

8. **Prior to commencing development under this consent, the Applicant must notify the Department in writing of the date on which it will commence development permitted under this consent.**

SURRENDER OF EXISTING DEVELOPMENT CONSENT

9. Within 4 months of commencing development under this consent, the Applicant must surrender the development consent (DA 91/1194) for existing operations on the site in accordance with Section 104A of the EP&A Act.

Following the commencement of development under this consent, the conditions of this consent (including any notes) shall prevail to the extent of any inconsistency with the conditions of the existing development consent (DA 91/1194).

STRUCTURAL ADEQUACY

10. The Applicant must ensure that any new buildings and structures, and any alterations, or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

DEMOLITION

11. The Applicant must ensure that all demolition work on site is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

12. The Applicant must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to any damage to roads caused as a result of general road usage.

OPERATION OF PLANT AND EQUIPMENT

13. The Applicant must ensure that all plant and equipment used on site or any monitoring equipment used off site for monitoring the performance of the development is:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

UPDATING AND STAGING STRATEGIES, PLANS OR PROGRAMS

14. With the approval of the Secretary, the Applicant may submit any strategies, plans or programs required by this consent on a progressive basis.

To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.

15. Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant **must** implement the existing strategies, plans or programs for the site that have been approved under DA 91/1194.

IDENTIFICATION OF APPROVED LIMITS OF EXTRACTION

16. Prior to undertaking quarrying operations in the extension area, the Applicant **must**:
- (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and
 - (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.
17. While quarrying operations are being carried out, the Applicant **must** ensure that these boundaries are clearly marked at all times to allow operating staff and inspecting officers to clearly identify the approved limits of extraction.

PRODUCTION DATA

18. The Applicant **must**:
- (a) provide annual quarry production data to DRE using the standard form for that purpose; and
 - (b) include a copy of this data in the Annual Review (see condition 4 of schedule 5).

DEVELOPER CONTRIBUTIONS

19. The Applicant **must** pay Camden Council road maintenance contributions of \$0.0811 for every tonne of material transported to and from the site, indexed to CPI. Each payment must be:
- (a) paid to Council at the end of each calendar year; and
 - (b) based on weighbridge records of all supplementary brick making materials transported to the site and bricks and spoil transported from the site.

Note: If the parties are not able to agree on any aspect of the maintenance contributions, either party may refer the matter to the Secretary for resolution.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

HOURS OF OPERATION

- The Applicant **must** comply with the operating hours set out in Table 1.

Table 1: Operating Hours

Activity	Operating Hours
<ul style="list-style-type: none"> Quarrying operations Deliveries Dispatch of finished bricks 	6am to 6pm, Monday to Friday 6am to 1pm, Saturday No activities on Sundays or Public Holidays
Brick making operations (except dispatch of finished bricks)	24 hours a day, 7 days a week
Construction activities	7am to 6pm, Monday to Friday 8am to 1pm, Saturday No construction to be undertaken on Sundays or Public Holidays

NOISE

Noise Criteria

- The Applicant **must** ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.

Table 2: Noise criteria dB(A)

Activity	Receiver	Day/Evening/Shoulder	Night	
		<i>L_{Aeq}(15 min)</i>	<i>L_{Aeq}(15 min)</i>	<i>L_{A1}(max)</i>
Brick making and quarrying	R1, R2	47	Not Applicable	
	R3, R4, R14	46		
	R15, R17	45		
	All other receivers	44		
Brick making	All receivers	44	43	53

Notes:

- To locate the receivers referred to in Table 2 refer to Appendix 3.
- After the first review on any EPL granted for this development under Section 78 of the POEO Act, nothing in this consent prevents the EPA from imposing stricter noise limits on the quarrying operations on site under the EPL.

Appendix 5 sets out the metrological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner/s to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

Construction Noise

- The Applicant **must** manage noise generated during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road, in accordance with the guidelines specified in Table 2 of the *Interim Construction Noise Guideline*.

Note: Management guidelines are applicable to receivers 3 and 4, shown in Appendix 3.

Noise Bunds

4. The Applicant must ensure that the noise bund adjacent to the northern boundary of the extraction area is constructed prior to the commencement of quarrying operations in the extension area.
- 4A. The Applicant must ensure that the noise bund adjacent to Greendale Road is constructed prior to the commencement of brick making operations.

Operating Conditions

5. The Applicant **must**:
 - (a) implement all reasonable and feasible mitigation measures to minimise construction, operational and road noise of the development;
 - (b) implement periods of respite during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road;
 - (c) regularly assess noise monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the noise criteria in this consent;
 - (d) maintain the effectiveness of noise suppression equipment on plant and equipment on site;
 - (e) minimise the noise impacts of the development during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 5); and
 - (f) carry out regular noise monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.

Noise Management Plan

6. The Applicant **must** prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (c) describe the reasonable and feasible mitigation measures that would be implemented to ensure:
 - construction noise is minimise;
 - compliance with the relevant noise criteria and operating conditions in this consent;
 - best management practice is being employed; and
 - the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;
 - (d) describe the proposed noise management system on site; and
 - (e) include a quarterly (or as otherwise agreed with the Secretary) noise monitoring program that:
 - uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent;
 - evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and
 - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

AIR QUALITY

Air Quality Criteria

7. The Applicant **must** implement all reasonable and feasible avoidance and mitigation measures so that particulate matter emissions generated by the development do not exceed the criteria in Tables 3 to 6 at any residence on privately-owned land.

Table 3: Long-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Total suspended particulates (TSP)	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 4: Short-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 5: Long-Term Criteria for Deposited Dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Table 6: Long and Short-Term Stack Emissions

Pollutant	Averaging period	^d Criterion
Sulphur Dioxide	10-minute	712 µg/m ³
	1-Hour	570 µg/m ³
	24-Hour	228 µg/m ³
	Annual	60 µg/m ³
Nitrogen Dioxide	1-Hour	246 µg/m ³
	Annual	62 µg/m ³
Hydrogen Chloride	1 hour	0.14 mg/m ³

Notes to Tables 3-6:

- ^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).
- ^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).
- ^c 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, illegal activities or any other activity agreed by the Secretary in consultation with EPA.

Operating Conditions

8. The Applicant **must**:
 - (a) implement all reasonable and feasible measures to minimise the stack and dust emissions of the development;
 - (b) minimise surface disturbance and maximise progressive rehabilitation;
 - (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note (d) to Tables 3-6 above); and
 - (d) monitor and report on compliance with the relevant air quality conditions in this consent; to the satisfaction of the Secretary.

Air Quality Management Plan

9. The Applicant **must** prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (c) describe the measures that would be implemented to ensure:
 - compliance with the air quality criteria and operating conditions under this consent;
 - best practice management is being employed; and
 - the air quality impacts of the development are minimised during adverse meteorological conditions;
 - (d) describe the air quality management system; and
 - (e) include an air quality monitoring program that:
 - evaluates and reports on:
 - the effectiveness of the air quality management system; and
 - compliance with the air quality criteria and operating conditions; and
 - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

METEOROLOGICAL MONITORING

10. For the life of the development, the Applicant **must** ensure that there is a suitable meteorological station operating in the vicinity of the site that:
- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
 - (b) is capable of continuous measurement of stability class, in accordance with the *NSW Industrial Noise Policy*, or as otherwise approved by EPA.

TRANSPORT

Monitoring of Product Transport

11. The Applicant **must** keep accurate records of the:
- (a) **tonnage** of bricks transported from the site (monthly and annually);
 - (b) amount of raw material imported to the site (monthly and annually); and
 - (c) **tonnage of each type of raw materials imported to the site (monthly and annually);** and provide the Secretary with a summary of this information upon request.

Parking

12. The Applicant **must** provide sufficient parking on-site for all development-related traffic, in accordance with Camden Council's parking codes, to the satisfaction of the Secretary.

Operating Conditions

13. The Applicant **must** ensure that:
- (a) all development-related heavy vehicles enter and exit the site in a forward direction;
 - (b) all laden vehicles entering or exiting the site have their loads covered (with the exception of vehicles carrying bricks);
 - (c) all laden vehicles that have accessed the extraction and/or stockpile areas are cleaned of sand and other material that may fall on the road, before leaving the site;
 - (d) all heavy vehicles exiting the site travel east of the site along Greendale Road to The Northern Road and/or Bringelly Road;
 - (e) the dispatch of laden trucks is avoided during the peak drop-off and pick-up times at the Bringelly Public School to the greatest extent practicable, particularly prior to the upgrade of the Greendale Road/Bringelly Road intersection by RMS; and
 - (f) no trucks queue at the entrance to the site before 6am.

Access Road Intersection Construction

14. Within 12 months of commencing development under this consent, unless otherwise agreed with the Secretary, the Applicant must design and construct the new site access road intersection with Greendale Road in accordance with applicable AUSTROADS standards, to the satisfaction of Camden Council. The Applicant must notify the Secretary in writing within 30 days of obtaining Council approval.

Within 7 days of completing construction and the new site access road being operational, the existing site access road must be permanently closed.

Transport Management Plan

15. The Applicant **must** prepare a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with RMS, Camden Council, Liverpool City Council and Bringelly Public School, and be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (b) describe the measures that would be implemented to ensure compliance with the transport operating conditions under this consent, including specific measures to avoid **the arrival and**

- [dispatch](#) of laden trucks from the site during the peak drop-off and pick-up times at the Bringelly Public School;
- (c) include a Code of Conduct for heavy vehicle drivers that addresses:
- travelling speeds;
 - [procedures to minimise noise including a regular Truck Noise Auditing Program](#);
 - [procedures to minimise diesel exhaust emissions](#);
 - instructions to avoid grouping or convoying of trucks;
 - procedures to ensure that drivers adhere to the designated haulage routes and the haulage hours permitted under this consent;
 - instructions to drivers not to overtake each other on the haulage route, as far as practicable, and to maintain appropriate distances between vehicles; and
 - instruction to drivers to be properly safety conscious and to strictly obey all traffic regulations, particularly in relation to school zones along Greendale Road; and
- (d) describe the measures that would be put in place to ensure compliance with the drivers' Code of Conduct and include a program to monitor the effectiveness of the implementation of these measures.

[The Applicant must implement the approved management plan as approved from time to time by the Secretary.](#)

SOIL AND WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater.

Water Supply

16. The Applicant [must](#) ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply to the satisfaction of the Secretary.

Water Discharges

17. The Applicant [must](#) comply with the discharge limits in any EPL or with Section 120 of the POEO Act.

Water Management Plan

18. The Applicant [must](#) prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified person/s approved by the Secretary;
 - (b) be prepared in consultation with the EPA and [DPI Water](#);
 - (c) be submitted to the Secretary for approval [prior to the commencement of development under this consent](#), unless the Secretary agrees otherwise;
 - (d) include a Site Water Balance that:
 - includes details of:
 - quantity of water required to support operations;
 - sources and security of water supply;
 - water use and management on site;
 - reporting procedures; and
 - measures to be implemented to minimise potable water use on site;
 - (e) include a Surface Water Management Plan, that includes:
 - baseline data on surface water flows and quality in the watercourses that could be affected by the development;
 - a description of the surface water management system on site, including:
 - clean water diversions;
 - erosion and sediment controls;
 - the dirty water management system; and
 - water storages (addressing maximum harvestable rights if applicable);
 - performance criteria, including trigger levels for investigating any potentially adverse surface water quality impacts;
 - a program to monitor and report on:
 - any surface water discharges;

- the effectiveness of the water management system; and
 - surface water flows and quality in local watercourses;
 - a plan to respond to any exceedances of the performance criteria.
- (f) a Groundwater Management Plan, which includes:
- baseline data on groundwater levels, yield and quality in surrounding aquifers;
 - groundwater assessment and performance criteria, including trigger levels for investigating potentially adverse groundwater impacts;
 - a program to monitor:
 - groundwater inflows to the quarry pit; and
 - impacts of the development on surrounding aquifers;
 - an analysis of the monitoring results to determine long-term water levels within the quarry void; and
 - a plan to respond to any exceedances of the performance criteria.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

BIODIVERSITY

Biodiversity Offset Strategy

19. The Applicant **must** implement the Biodiversity Offset Strategy described in the EIS, as summarised in Table 7 and shown conceptually in Appendix 4, to the satisfaction of the Secretary.

Table 7: Summary of the Biodiversity Offsets

Area	Offset Criteria	Size (Ha)
On-site offset	Existing vegetation to be enhanced to establish an area of native woodland comprising species associated with Cumberland Plain Woodland.	1.93

Security of Offsets

20. Within 2 years of **notifying the Department of commencement of development (see condition 8 of Schedule 2)**, unless otherwise agreed with the Secretary, the Applicant **must** make suitable arrangements to provide appropriate long-term security for the offset area, to the satisfaction of the Secretary.

Note: Mechanisms to provide appropriate long term security to the land within the Biodiversity Offset Strategy include a Biobanking Agreement, Voluntary Conservation Agreement or an alternative mechanism that provides for a similar conservation outcome. Any mechanism must remain in force in perpetuity.

Biodiversity Management Plan

21. The Applicant **must** prepare a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the OEH and Camden Council;
 - (b) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - (c) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;
 - (d) describe the short, medium, and long term measures that would be implemented to:
 - manage the remnant vegetation and habitat on the site and in the offset area and;
 - implement the biodiversity offset strategy, including detailed performance and completion criteria;
 - (e) include performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);
 - (f) include a description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
 - maximising the salvage of resources within the approved disturbance area - including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;

- minimising the impacts on fauna on site, including pre-clearance surveys and minimising the potential exposure to tailings;
 - controlling weeds and feral pests;
 - controlling erosion;
 - controlling access; and
 - bushfire management;
- (g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
- (h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

Conservation Bond

22. Within 6 months of the approval of the Biodiversity Management Plan, the Applicant **must** lodge a conservation bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.

The sum of the bond **must** be determined by:

- a. calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and
- b. employing a suitably qualified quantity surveyor to verify the calculated costs,
- c. to the satisfaction of the Secretary.

The calculation of the conservation bond must be submitted to the Department for approval at least 1 month prior to lodgement of the final bond.

If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.

If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.

Notes:

- *Alternative funding arrangements for long term management of the biodiversity offset strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to conservation reserve estate (or any other mechanism agreed with OEH) can be used to reduce the liability of the conservation bond.*
- *The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy or the completion of major milestones within the approved plan.*

REHABILITATION

Rehabilitation Objectives

23. The Applicant **must** rehabilitate the site to the satisfaction of the Secretary. Rehabilitation must:
- a. comply with the objectives in Table 8; and
 - b. be generally consistent with the proposed rehabilitation strategy in the EIS, and the final land form shown conceptually in Appendix 4 (unless modified by the Final Land Use Options Plan, prepared in accordance with condition 25 of this consent).

Table 8: Rehabilitation Objectives

Feature	Objective
Site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native species and habitat

Surface infrastructure	<ul style="list-style-type: none"> To be decommissioned and removed (unless the Secretary agrees otherwise)
Final void	<ul style="list-style-type: none"> Minimise the size, depth and slope of the batters of the final void Minimise the drainage catchment of the final void
Quarry pit floor	<ul style="list-style-type: none"> Landscaped and revegetated using native flora species, above the anticipated final void water level
Community	<ul style="list-style-type: none"> Ensure public safety

Progressive Rehabilitation

24. The Applicant **must** rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible 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.

Final Land Use Options Plan

25. The Applicant **must** prepare a Final Land Use Options Plan for the site to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with DRE and Camden Council;
 - be submitted to the Secretary for approval within 2 years of the date of [notifying the Department of commencement of development \(see condition 8 of Schedule 2\)](#), unless the Secretary agrees otherwise;
 - provide details of the conceptual final landform and associated final land uses for the site;
 - ensure that the conceptual final land form is compatible with surrounding land uses, and is consistent with the rehabilitation objectives in Table 8 and the objectives of the Growth Centres SEPP for the South West Growth Centre;
 - inform the Rehabilitation Management Plan (prepared in accordance with condition 26 of this consent); and
 - be reviewed every 7 years to account for applicable land use priorities, and if necessary updated.

Rehabilitation Management Plan

26. The Applicant **must** prepare a Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH, DRE, [DPI Water](#) and Camden Council;
 - be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - provide details of the conceptual final landform and associated land uses for the site (which must be consistent with the Final Land Use Options Plan under condition 25 of this consent);
 - describe the short, medium and long term measures that would be implemented to:
 - manage remnant vegetation and habitat on site; and
 - ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
 - include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, including triggers for any necessary remedial action;
 - include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; and
 - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

[The Applicant must implement the approved management plan as approved from time to time by the Secretary.](#)

Note: The Rehabilitation Management Plan must be reviewed, and if necessary updated, following any update of the Final Land Use Options Plan.

HERITAGE

Heritage Management Plan

27. The Applicant **must** prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH;
 - (a) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - b. describe the measures that would be implemented to:
 - manage identified heritage objects, previously unidentified heritage objects or the discovery of any human remains on site;
 - ensure ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal cultural heritage values on site; and
 - protect sites identified adjacent to the development.

The Applicant **must** implement the approved management plan as approved from time to time by the Secretary.

VISUAL

28. The Applicant **must** establish a vegetation screen on both noise bunds, as soon as practicable after construction of the bunds, to minimise visibility of site infrastructure from outside the development area. Following establishment, the Applicant **must** maintain the vegetation screen, to the satisfaction of the Secretary.
29. The Applicant **must**:
- implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development; and
 - b) ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version.

BUSHFIRE MANAGEMENT

30. The Applicant **must**:
- ensure that the development is suitably equipped to respond to any fires on site; and
 - b) assist the Rural Fire Service, emergency services and National Parks and Wildlife Service as much as practicable if there is a fire in the surrounding area.

WASTE

31. Prior to importing onto the site any material that may be classified as a waste under the EPA *Waste Classification Guidelines 2009* (or its latest version), the Applicant must obtain a 'resource recovery exemption' under the POEO Act and provide evidence of this exemption to the Department.

Note: This condition does not apply to routine deliveries to the site.

32. The Applicant **must**:
- manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Camden Council; and
 - b) pump all sewage generated and stored on-site to a sewage treatment facility, unless otherwise agreed with the Secretary.
33. The Applicant **must**:
- minimise the waste generated by the development;
 - b) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
 - c) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. As soon as practicable after obtaining monitoring results showing an exceedance of any relevant criteria in schedule 3, the Applicant **must** notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria.

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant **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 development is complying with the relevant criteria in schedule 3;
 - if the development is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

**SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING**

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.

The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.

Adaptive Management

2. The Applicant must assess and manage development-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 consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.

Management Plan Requirements

3. The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:

- impacts and environmental performance of the development; and
- effectiveness of any management measures (see (c) above);
- (e) a contingency plan to manage any unpredicted impacts and their consequences;
- (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
- (g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Annual Review

4. By the end of September each year, the Applicant [must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary](#). This review must:
 - (a) describe the development (including rehabilitation) that was carried out in the previous [financial](#) year, and the development that is proposed to be carried out over the current [financial](#) year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous [financial](#) year, which includes a comparison of these results against:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years; and
 - the relevant predictions in the [documents in condition 2\(a\) of Schedule 2](#);
 - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the current [financial](#) year to improve the environmental performance of the development.

Revision of Strategies, Plans and Programs

5. [Within 3 months of the submission of an:](#)
 - (a) [Annual Review under condition 4 above;](#)
 - (b) [incident report under condition 7 below;](#)
 - (c) [audit report under condition 9 below; and](#)
 - (d) [any modifications to this consent,](#)
 the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.

Note: 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 development.

Community Consultative Committee

6. The Applicant [must](#) establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the [Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments](#) (Department of Planning, 2007, or its latest version), and be operating [prior to the commencement of development under this consent](#).

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*

- In accordance with the guideline, the Committee should comprise an independent chair and appropriate representation from the Applicant, Camden Council and the local community.

REPORTING

Incident Reporting

7. The Applicant **must** immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant **must** provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

8. The Applicant **must** provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

INDEPENDENT ENVIRONMENTAL AUDIT

9. Within a year of **commencing development under this consent**, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant **must** commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licence (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategy, plan or program required under these approvals;
 - (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals; **and be conducted and reported to the satisfaction of the Secretary.**

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

10. Within **12 weeks of commencing** this audit, unless the Secretary agrees otherwise, the Applicant **must** submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.

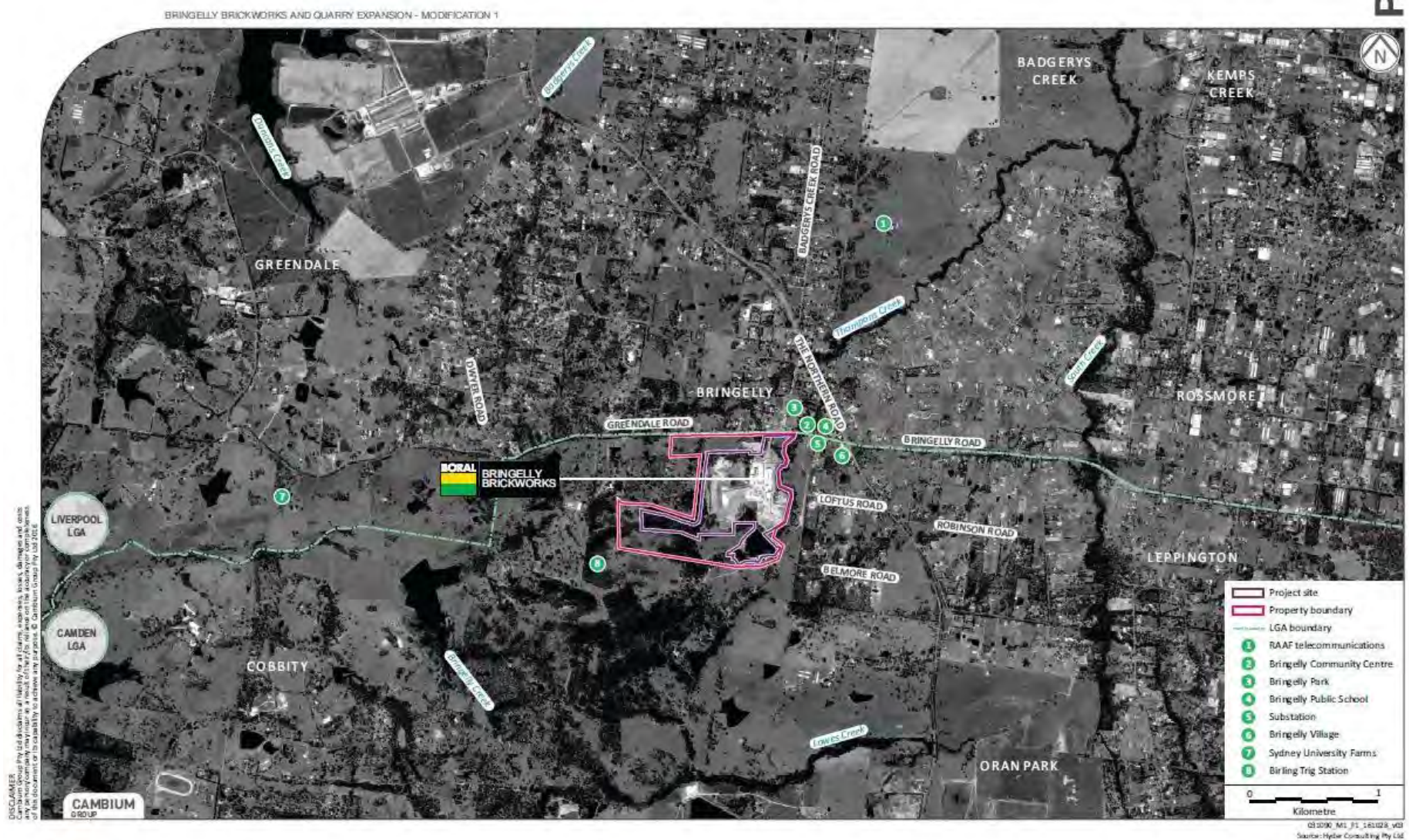
Within 7 days of commencing the audit, the Applicant must notify the Department in writing of the commencement of the audit.

ACCESS TO INFORMATION

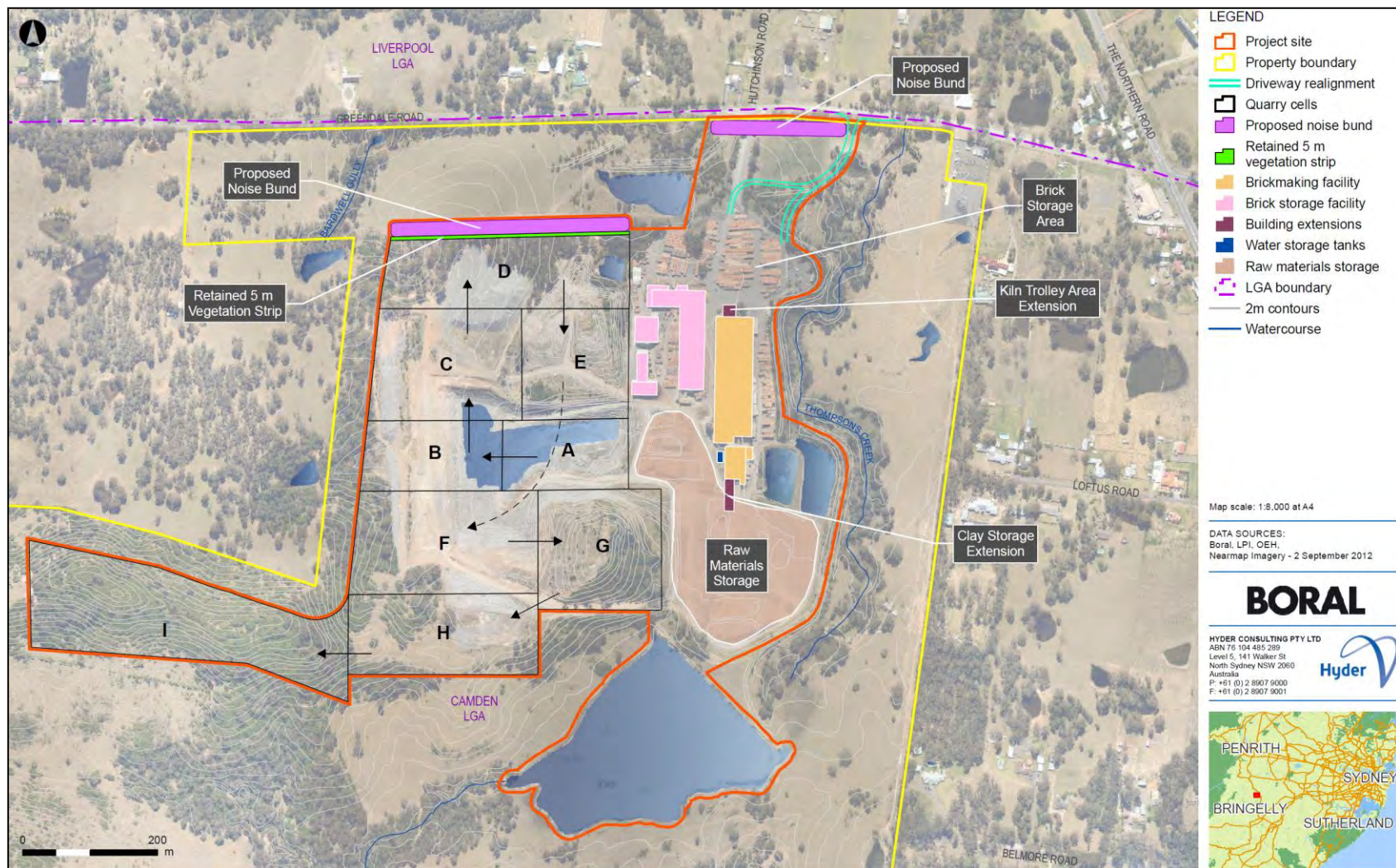
11. Within 6 months of **commencing development under this consent**, the Applicant **must**:
 - (a) make copies of the following publicly available on its website:
 - the documents in **condition 2(a) of Schedule 2**;
 - current statutory approvals for the development;
 - approved strategies, plans and programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - a complaints register, which is to be updated monthly;
 - minutes of CCC meetings;
 - the annual reviews of the development (for the last 5 years);
 - any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit;
 - any other matter required by the Secretary; and

(b) keep this information up-to-date,
to the satisfaction of the Secretary.

APPENDIX 1 DEVELOPMENT AREA



APPENDIX 2 DEVELOPMENT LAYOUT



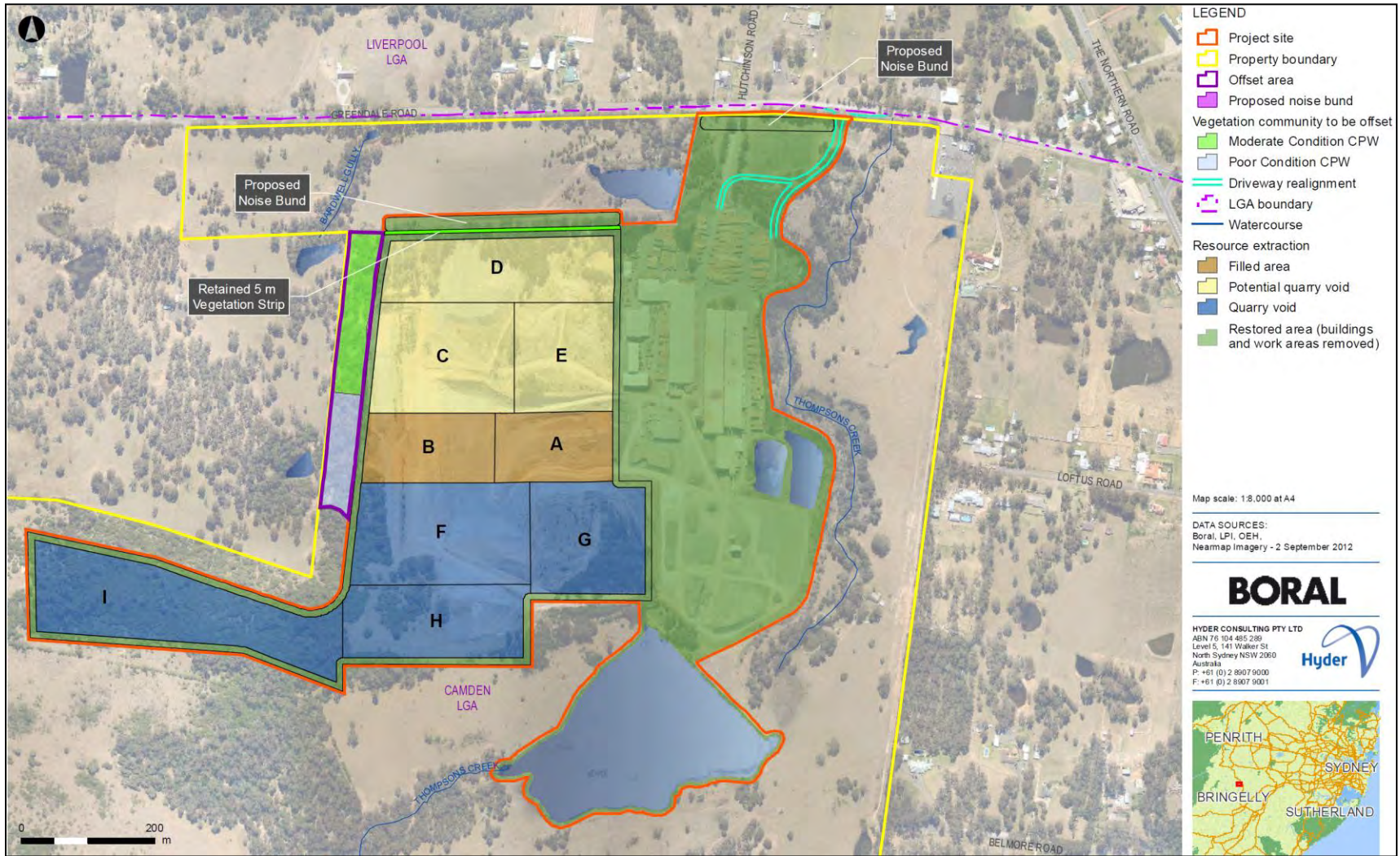
APPENDIX 3 RECEIVER LOCATIONS



Receiver number	Receiver address
1	55 Loftus Road
2	54 Loftus Road
3	20 Greendale Road
4	9 Greendale Road
5	5 Greendale Road (Bringelly Community Centre)
6	46 Loftus Road
7	36 Loftus Road
8	47 Loftus Road
9	37 Loftus Road
10	27 Loftus Road
11	26 Loftus Road
12	15 Loftus Road
13	5 Loftus Road
14	23 Greendale Road
15	27 Greendale Road
16	29 Greendale Road
17	25 Greendale Road
18	31 Greendale Road
19	35 Greendale Road
20	170 Tyson Road
21	196 Greendale Road
22	46 Belmore Road
23	55 Belmore Road
24	63 Belmore Road
25	67 Belmore Road
26	73 Belmore Road
27	83-85 Belmore Road
28	76 Belmore Road
29	86 Belmore Road
30	87 Belmore Road
31	93 Belmore Road
32	95-97 Belmore Road
33	107 Belmore Road
34	96 Belmore Road
35	108 Belmore Road
36	1037 Northern Road
37	10 Greendale Road
38	Bringelly Public School

APPENDIX 4

CONCEPTUAL FINAL LANDFORM AND BIODIVERSITY OFFSET STRATEGY



APPENDIX 5 NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Table 2 of the conditions are to apply under all meteorological conditions except the following:
 - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
 - (b) temperature inversion conditions between 1.5 °C and 3°C/100 m and wind speeds greater than 2 m/s at 10 m above ground level; or
 - (c) temperature inversion conditions greater than 3°C/100 m.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions **must** be that recorded by the meteorological station on or in the vicinity of the site.

Compliance Monitoring

3. Unless directed otherwise by the Secretary, quarterly attended monitoring is to be used to evaluate compliance with the relevant conditions of consent.

Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.

4. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
 - (a) monitoring locations for the collection of representative noise data;
 - (b) meteorological conditions during which collection of noise data is not appropriate;
 - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
 - (d) modifications to noise data collected including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

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Noise Monitoring Assessment

PGH Bringelly Brickworks

Bringelly, NSW

Quarter 1 Ending March 2021



Document Information

Noise Monitoring Assessment

PGH Bringelly Brickworks

Bringelly, NSW

Quarter 1 Ending March 2021

Prepared for: PGH Bricks & Pavers Pty Ltd

Greendale Road

Bringelly NSW 2256



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1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has been commissioned by PGH Bricks & Pavers Pty Ltd (PGH) to complete a Noise Monitoring Assessment (NMA) for the PGH Bringelly Brickworks (the 'site') at Greendale Road, Bringelly, NSW.

This assessment has been undertaken for the quarterly period ending March 2021, and forms part of the annual noise monitoring program to address conditions outlined in the Development Consent.

The NMA has quantified potential operational and sleep disturbance noise emissions from the operation and has been conducted in accordance with the following documents:

- NSW Environment Protection Authority (EPA), Noise Policy for Industry (NPI), 2017;
- Bringelly Brickworks Noise Management Plan (NMP ref BRK-BRI-NMP Version 4 dated 12.02.19), 2019;
- Bringelly Brickworks Development Consent, 2015 (SSD_5684); and
- Australian Standard AS 1055:2018 - Acoustics - Description and measurement of environmental noise.

A glossary of terms, definitions and abbreviations used in this report is provided in **Appendix A**.

The Development Consent is provided in **Appendix B**.

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2 Noise Criteria

The Bringelly Brickworks NMP outlines the applicable noise criteria for representative residential receivers surrounding the site and are presented in **Table 1**. The site includes the operation of a quarry and brickmaking plant, and as the quarry operates during the daytime, there are separate criteria relating to each period.

Table 1 Noise Criteria ¹				
Activity	Receiver	Day/Evening/Shoulder ^{2,3}	Night ²	
		dB LAeq(15min)	dB LAeq(15min)	dB LA1(max) ³
Brickmaking and quarrying	R1, R2	47	N/A	
	R3, R4, R14	46		
	R15, R17	45		
	All other receivers	44		
Brickmaking	All Receivers	44	43	53

Note 1: Noise criteria adopted from the Development Consent.

Note 2: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

Note 3: Periods and parameters as expressed in the Development Consent

Figure 1 presents the identified receiver locations and representative measurement locations.

Section 4 of the Bringelly Brickworks Development Consent, 2015 (SSD_5684) outlines requirements for Noise Bunds adjacent to the northern boundary of the extraction area and adjacent to Greendale Road. It is noted that the proposed new access road and associated noise bund adjacent to Greendale Road are not in place at the time of the monitoring. Further details on review of noise mitigation measures for the site are contained in a historic report (MAC190946LR1, 29 September 2019).



FIGURE 1
SITE LAYOUT
MAC190946-02
PGH Bringelly Brickworks

KEY

- Monitoring Locations
- Receivers



3 Assessment Methodology

The attended noise measurements were conducted in general accordance with the procedures described in Australian Standard AS 1055:2018, "Acoustics - Description and Measurement of Environmental Noise". Measurements were conducted using a Svantek Type 1, 971 noise analyser. The acoustic instrumentation used carries current NATA calibration and complies with AS IEC 61672.1-2019- Electroacoustics - Sound level meters - Specifications. Calibration of all instrumentation was checked prior to and following measurements. Drift in calibration did not exceed $\pm 0.5\text{dBA}$.

Noise measurements were of 15-minutes in duration and where possible, throughout each survey the operator quantified the contribution of each significant noise source. Measurements were conducted at five locations (N1, N3, N14, N20, N35) on Tuesday 9 February 2021, during the daytime, evening and night time periods to satisfy the requirements of the NMP.

Extraneous noise sources were excluded from the analysis to determine the $\text{LA}_{\text{eq}}(15\text{min})$ quarry noise contribution for comparison against the relevant criteria. In the event of site attributed noise being above criteria, prevailing meteorological conditions for the monitoring period are analysed in accordance with Fact Sheet D of the NPI to determine the stability category present at the time of each attended measurement.

Where the site is inaudible, the contribution is estimated to be at least 10dBA below the ambient noise level.

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4 Results

4.1 Assessment Results - Location N1

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N1 for the NMA are presented in **Table 2**.

Table 2 Operator-Attended Noise Survey Results – Location N1

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
09/02/2021	13:05 (Day)	62	51	43	WD: NE WS: <0.1m/s Rain: Nil	Local Plant (Not Site) 45-55
						Insects 38-44
						Birds 40-43
						Aircraft 40-52
						Local Traffic 60-74
						Distant Traffic 35-40
PGH Audible 32-36						
PGH Site LAeq(15min) Contribution						34
09/02/2021	20:13 (Evening)	50	52	38	WD: N WS: 0.2m/s Rain: Nil	Distant Traffic 37-40
						Door Slam 70-89
						Insects 39-40
						Birds 36-38
						Dogs 40-63
						PGH Audible 34-38
PGH Site LAeq(15min) Contribution						35
09/02/2021	22:25 (Night)	51	44	37	WD: N WS: <0.1m/s Rain: Nil	Insects 39-40
						Distant Traffic 36-41
						Dogs 42-65
						PGH Audible 35-38
PGH Site LAeq(15min) Contribution						37

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.2 Assessment Results - Location N3

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N3 for the NMA are presented in **Table 3**.

Table 3 Operator-Attended Noise Survey Results – Location N3

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
09/02/2021	13:39 (Day)	79	66	40	WD: N WS: <0.1m/s Rain: Nil	Birds 38-49
						Local Traffic 60-85
						Distant Traffic 34-42
						Insects 35-38
						PGH Audible 32-35
PGH Site LAeq(15min) Contribution						34
09/02/2021	19:54 (Evening)	68	57	42	WD: N WS: <0.1m/s Rain: Nil	Birds 42-61
						Local Traffic 60-75
						Insects 38-40
						Domestic Noise 38-40
						PGH Audible 32-36
PGH Site LAeq(15min) Contribution						34
09/02/2021	22:44 (Night)	67	53	42	WD: N WS: <0.1m/s Rain: Nil	Distant Traffic 40-46
						Local Traffic 68-74
						Aircraft 43-46
						Frogs 42-44
						Dogs <35
PGH Audible 36-37						36
PGH Site LAeq(15min) Contribution						36

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.3 Assessment Results - Location N14

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N14 for the NMA are presented in **Table 4**.

Table 4 Operator-Attended Noise Survey Results – Location N14

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
09/02/2021	14:00 (Day)	78	64	44	WD: W WS: <0.1m/s Rain: Nil	Insects 45-50
						Local Traffic 60-86
						Distant Traffic 43-45
						Aircraft 40-45
						Truck Entry at PGH 45-50 (30sec)
PGH Site LAeq(15min) Contribution						<40
09/02/2021	19:34 (Evening)	75	61	38	WD: S WS: 0.3m/s Rain: Nil	Local Traffic 45-80
						Birds 45-50
						PGH Audible 36-38
PGH Site LAeq(15min) Contribution						37
09/02/2021	23:26 (Night)	53	47	38	WD: N WS: 0.2m/s Rain: Nil	Insects 34-35
						Distant Traffic 35-42
						Local Traffic 50-66
						Dogs 35-37
						PGH Audible 34-38
PGH Site LAeq(15min) Contribution						35

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.4 Assessment Results - Location N20

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N20 for the NMA are presented in **Table 5**.

Table 5 Operator-Attended Noise Survey Results – Location N20

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
09/02/2021	14:21 (Day)	74	64	39	WD: SW WS: 1.5m/s Rain: Nil	Distant Traffic 40-44
						Local Traffic 60-83
						Aircraft 40-46
						Birds 33-38
						Insects 40-42
						Frogs 40-41
						Other Industry (Not Site)
						PGH Not Audible
						PGH Site LAeq(15min) Contribution
						<35
09/02/2021	19:15 (Evening)	75	62	42	WD: N WS: 0.3m/s Rain: Nil	Birds 42-48
						Distant Traffic 40-52
						Local Traffic 66-88
						Insects 40-44
						PGH Not Audible
						PGH Site LAeq(15min) Contribution
						<35
						Insects 39-44
						Distant Traffic 37-43
						Local Traffic 50-71
09/02/2021	23:03 (Night)	62	51	40	WD: N WS: <0.1m/s Rain: Nil	Cattle <35
						Dogs <35
						PGH Not Audible
						PGH Site LAeq(15min) Contribution
						<35
						Insects 39-44
						Distant Traffic 37-43
						Local Traffic 50-71
						Cattle <35
						Dogs <35

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.5 Assessment Results - Location N35

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N35 for the NMA are presented in **Table 6**.

Table 6 Operator-Attended Noise Survey Results – Location N35

Date	Time (hrs)	Descriptor (dBA re 20 μPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
09/02/2021	12:40 (Day)	55	45	38	WD: W WS: <0.1m/s Rain: Nil	Distant Traffic 38-46
						Local Traffic 55-60
						Aircraft 40-53
						Birds 40-52
						Frogs 36-38
						PGH Not Audible
PGH Site LAeq(15min) Contribution						<35
09/02/2021	20:42 (Evening)	50	46	44	WD: N WS: 0.3m/s Rain: Nil	Distant Traffic 43-46
						Dogs 44-47
						Insects 40-44
						Frogs 44-46
						PGH Not Audible
						PGH Site LAeq(15min) Contribution
09/02/2021	22:00 (Night)	52	46	42	WD: N WS: 0.2m/s Rain: Nil	Insects 47-50
						Distant Traffic 35-37
						Dogs 38-40
						Frogs 48-52
						PGH Not Audible
						PGH Site LAeq(15min) Contribution

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

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5 Discussion

Monitoring on Tuesday 9 February 2021 identified site noise was audible during all periods at monitoring locations N1, N3 and N14. Site contributions were not audible during any period at monitoring location N20 and N35. Site attributable noise contributions were estimated to satisfy the relevant noise criteria at all locations during all assessment periods.

Audible site noise sources included the combustion fan and trucks entering the site on the access road. Extraneous noise sources measured included insects, birds, traffic, aircraft noise and dogs barking.

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6 Conclusion

Muller Acoustic Consulting Pty Ltd (MAC) has completed a Noise Monitoring Assessment (NMA) PGH Bricks & Pavers Pty Ltd (PGH) at the PGH Bringelly Brickworks (the 'site') at Greendale Road Bringelly, NSW. The assessment was completed to assess the site's compliance with the relevant noise criteria during Quarter 1, ending March 2021.

Attended noise monitoring was undertaken on Tuesday 9 February 2021 at five representative receiver locations. The assessment has identified that noise emissions generated by Bringelly Brickworks were occasionally audible, however quarry noise emissions were below the relevant noise criteria throughout the survey period, satisfying the relevant consent conditions.

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Appendix A – Glossary of Terms

A number of technical terms have been used in this report and are explained in **Table A1**.

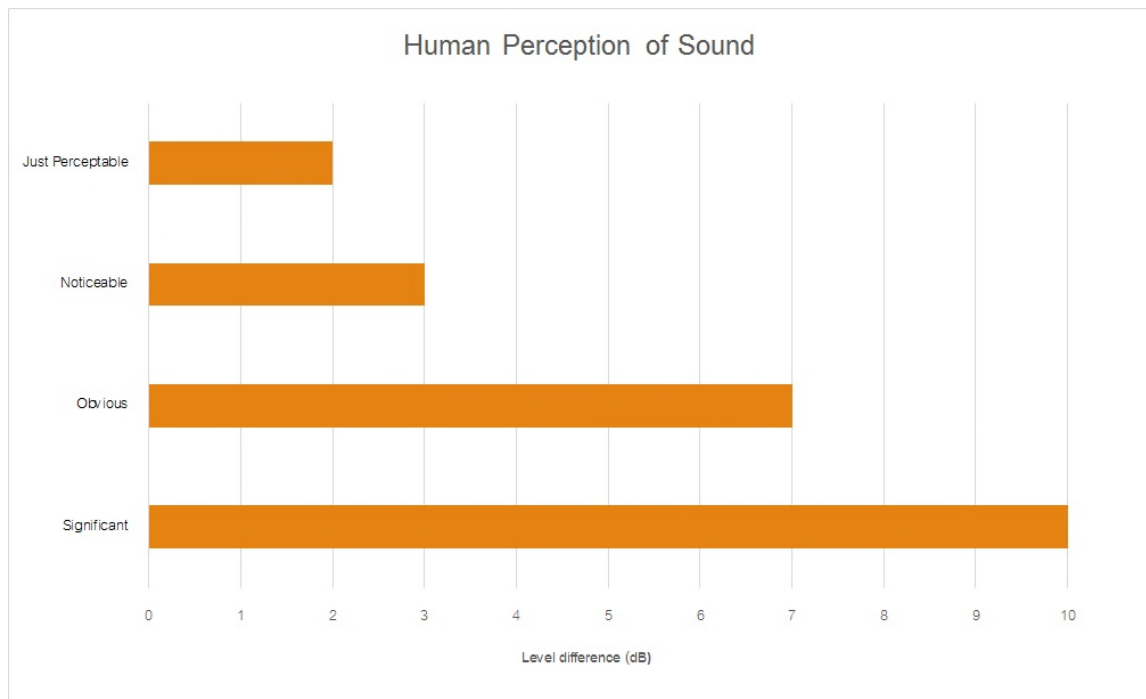
Table A1 Glossary of Acoustical Terms	
Term	Description
1/3 Octave	Single octave bands divided into three parts
Octave	A division of the frequency range into bands, the upper frequency limit of each band being twice the lower frequency limit.
ABL	Assessment Background Level (ABL) is defined in the NPI as a single figure background level for each assessment period (day, evening and night). It is the tenth percentile of the measured L90 statistical noise levels.
Ambient Noise	The total noise associated with a given environment. Typically, a composite of sounds from all sources located both near and far where no particular sound is dominant.
A Weighting	A standard weighting of the audible frequencies designed to reflect the response of the human ear to sound.
Background Noise	The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is usually represented by the LA90 descriptor
dBA	Noise is measured in units called decibels (dB). There are several scales for describing noise, the most common being the 'A-weighted' scale. This attempts to closely approximate the frequency response of the human ear.
dB(Z), dB(L)	Decibels Z-weighted or decibels Linear (unweighted).
Extraneous Noise	Sound resulting from activities that are not typical of the area.
Hertz (Hz)	The measure of frequency of sound wave oscillations per second - 1 oscillation per second equals 1 hertz.
LA10	A sound level which is exceeded 10% of the time.
LA90	Commonly referred to as the background noise, this is the level exceeded 90% of the time.
LAeq	Represents the average noise energy or equivalent sound pressure level over a given period.
LAmx	The maximum sound pressure level received at the microphone during a measuring interval.
Masking	The phenomenon of one sound interfering with the perception of another sound. For example, the interference of traffic noise with use of a public telephone on a busy street.
RBL	The Rating Background Level (RBL) as defined in the NPI, is an overall single figure representing the background level for each assessment period over the whole monitoring period. The RBL, as defined is the median of ABL values over the whole monitoring period.
Sound power level (Lw or SWL)	This is a measure of the total power radiated by a source in the form of sound and is given by $10 \cdot \log_{10} (W/W_0)$. Where W is the sound power in watts to the reference level of 10^{-12} watts.
Sound pressure level (Lp or SPL)	the level of sound pressure; as measured at a distance by a standard sound level meter. This differs from Lw in that it is the sound level at a receiver position as opposed to the sound 'intensity' of the source.

Table A2 provides a list of common noise sources and their typical sound level.

Table A2 Common Noise Sources and Their Typical Sound Pressure Levels (SPL), dBA

Source	Typical Sound Pressure Level
Threshold of pain	140
Jet engine	130
Hydraulic hammer	120
Chainsaw	110
Industrial workshop	100
Lawn-mower (operator position)	90
Heavy traffic (footpath)	80
Elevated speech	70
Typical conversation	60
Ambient suburban environment	40
Ambient rural environment	30
Bedroom (night with windows closed)	20
Threshold of hearing	0

Figure A1 – Human Perception of Sound



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Appendix B – Development Consent

Development Consent

Section 89E of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I approve the development application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

David Kitto
Executive Director
Resource Assessments and Business Systems

Sydney

2015

SCHEDULE 1

Application Number:

SSD_5684

Applicant:

Boral Bricks Pty Ltd

Consent Authority:

Minister for Planning

Land:

[Lot 100 in DP 1203966](#)

Development:

Bringelly Brickworks Extension Project

Modification 1 (October 2016 shown in [blue](#) text)

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DEFINITIONS

AHD	Australian Height Datum
Annual Review	The review required by condition 4 of schedule 5
Applicant	Boral Bricks Pty Ltd, or any other person or persons who rely on this consent to carry out the development that is subject to this consent
BCA	Building Code of Australia
Biodiversity offset strategy	The conservation and enhancement strategy described in the EIS, and shown conceptually in Appendix 4
Brick making operations	Includes the receipt, handling, processing, storage and transportation of raw materials on site, brick making on site and transportation of finished bricks on site
CCC	Community Consultative Committee
Conditions of consent	Conditions contained in schedules 1 to 5 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this consent
CPI	Australian Bureau of Statistics Consumer Price Index
Date of commencement	The date notified to the Department by the Applicant under condition 8 of Schedule 2
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment
Development	The development described in the documents of condition 2(a) of Schedule 2
Development area	All land to which the development application applies, as listed under "Land" in schedule 1 and shown in Appendix 1
DPI Water	Department of Primary Industries - Water
DRE	Division of Resources and Energy, within the NSW Department of Industry
EEC	Endangered Ecological Community, as defined under the <i>Threatened Species Conservation Act 1995</i>
EIS	Environmental Impact Statement titled <i>Bringelly Brickworks and Quarry Expansion</i> (2 volumes), dated September 2013, as modified by the Response to Submissions titled, <i>Bringelly Brickworks and Quarry Expansion, Response to Submissions</i> dated February 2014 and the letter entitled <i>Bringelly Brickworks – Biodiversity Offsets</i> , dated 2 June 2014
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6pm to 10pm
Extension area	The area outside of the existing quarry footprint (i.e. cells D, E, F, G, H and I, as shown conceptually in Appendix 2)
Feasible	Feasible relates to engineering considerations and what is practical to build
GDE	Groundwater Dependent Ecosystem
GPS	Global Positioning System
Growth Centres SEPP	<i>State Environmental Planning Policy (Sydney Regional Growth Centres) 2006</i>
Ha	Hectare
Incident	A set of circumstances that: <ul style="list-style-type: none"> causes or threatens to cause material harm to the environment; and/or breaches or exceeds the limits or performance measures/criteria in this consent
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedules 3 and 4 of this consent

	where it is defined to mean the whole of a lot, or contiguous lots, owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
m	Metres
Minister	Minister for Planning, or delegate
Mitigation	Activities associated with reducing the impacts of the development
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NP&W Act	<i>National Parks and Wildlife Act 1974</i>
OEH	NSW Office of Environment and Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or the Applicant (or its subsidiary)
Quarrying operations	Includes the removal of overburden and extraction, handling, storage and transportation of extractive materials on site
Raw materials	Raw materials imported for use in brick making including clay/shale and additives (such as manganese and iron oxides)
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, ensuring that it is safe, stable and non-polluting and appropriately revegetated
RMS	Roads and Maritime Services
Secretary	Secretary of the Department, or nominee
SEE (Mod 1)	Statement of Environmental Effects titled ' <i>Section 96(1A) Modification Supporting Information</i> ' dated August 2016 and prepared by Element Environment, including the Response to Submissions document dated September 2016
Site	The land listed under "Land" in schedule 1
Shoulder	The period between 6am to 7am on Monday to Saturday
South West Growth Centre	An area of land identified under the Growth Centres SEPP

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this consent, the Applicant **must** implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.

TERMS OF CONSENT

2. The Applicant **must**:
 - (a) carry out the development generally in accordance with the EIS **and SEE (Mod 1)**; and
 - (b) the conditions of this consent.

Note: The general layout of the development is shown in Appendix 2.

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
4. The Applicant **must** comply with any reasonable requirement/s of the Secretary arising the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent;
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; or
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

Quarrying and Brick Making Operations

5. The Applicant may carry out quarrying **operations** and brick making operations from the date of commencement of development under this consent until 1 March 2045.

Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.

Production Limits

6. The Applicant **must** not:
 - (a) extract more than 200,000 tonnes of clay/shale from the site in any calendar year;
 - (b) produce more than 263,500 tonnes of bricks at the site in any calendar year;
 - (c) carry out quarrying operations beyond 46 m AHD; and
 - (d) receive more than **321,000** tonnes of raw materials required for brick making to the site in any calendar year.

Transportation Limits

7. The Applicant **must** not:
 - (a) transport more than 263,500 tonnes of bricks from the site in a calendar year;
 - (b) receive more than 90 trucks to the site per day or more than 18 trucks per hour; and
 - (c) dispatch more than 90 trucks from the site per day or more than 18 trucks per hour.

NOTIFICATION OF COMMENCEMENT

8. **Prior to commencing development under this consent, the Applicant must notify the Department in writing of the date on which it will commence development permitted under this consent.**

SURRENDER OF EXISTING DEVELOPMENT CONSENT

9. Within 4 months of commencing development under this consent, the Applicant must surrender the development consent (DA 91/1194) for existing operations on the site in accordance with Section 104A of the EP&A Act.

Following the commencement of development under this consent, the conditions of this consent (including any notes) shall prevail to the extent of any inconsistency with the conditions of the existing development consent (DA 91/1194).

STRUCTURAL ADEQUACY

10. The Applicant must ensure that any new buildings and structures, and any alterations, or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

DEMOLITION

11. The Applicant must ensure that all demolition work on site is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

12. The Applicant must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to any damage to roads caused as a result of general road usage.

OPERATION OF PLANT AND EQUIPMENT

13. The Applicant must ensure that all plant and equipment used on site or any monitoring equipment used off site for monitoring the performance of the development is:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

UPDATING AND STAGING STRATEGIES, PLANS OR PROGRAMS

14. With the approval of the Secretary, the Applicant may submit any strategies, plans or programs required by this consent on a progressive basis.

To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.

15. Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant **must** implement the existing strategies, plans or programs for the site that have been approved under DA 91/1194.

IDENTIFICATION OF APPROVED LIMITS OF EXTRACTION

16. Prior to undertaking quarrying operations in the extension area, the Applicant **must**:
- (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and
 - (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.
17. While quarrying operations are being carried out, the Applicant **must** ensure that these boundaries are clearly marked at all times to allow operating staff and inspecting officers to clearly identify the approved limits of extraction.

PRODUCTION DATA

18. The Applicant **must**:
- (a) provide annual quarry production data to DRE using the standard form for that purpose; and
 - (b) include a copy of this data in the Annual Review (see condition 4 of schedule 5).

DEVELOPER CONTRIBUTIONS

19. The Applicant **must** pay Camden Council road maintenance contributions of \$0.0811 for every tonne of material transported to and from the site, indexed to CPI. Each payment must be:
- (a) paid to Council at the end of each calendar year; and
 - (b) based on weighbridge records of all supplementary brick making materials transported to the site and bricks and spoil transported from the site.

Note: If the parties are not able to agree on any aspect of the maintenance contributions, either party may refer the matter to the Secretary for resolution.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

HOURS OF OPERATION

- The Applicant **must** comply with the operating hours set out in Table 1.

Table 1: Operating Hours

Activity	Operating Hours
<ul style="list-style-type: none"> Quarrying operations Deliveries Dispatch of finished bricks 	6am to 6pm, Monday to Friday 6am to 1pm, Saturday No activities on Sundays or Public Holidays
Brick making operations (except dispatch of finished bricks)	24 hours a day, 7 days a week
Construction activities	7am to 6pm, Monday to Friday 8am to 1pm, Saturday No construction to be undertaken on Sundays or Public Holidays

NOISE

Noise Criteria

- The Applicant **must** ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.

Table 2: Noise criteria dB(A)

Activity	Receiver	Day/Evening/Shoulder	Night	
		<i>L_{Aeq}(15 min)</i>	<i>L_{Aeq}(15 min)</i>	<i>L_{A1}(max)</i>
Brick making and quarrying	R1, R2	47	Not Applicable	
	R3, R4, R14	46		
	R15, R17	45		
	All other receivers	44		
Brick making	All receivers	44	43	53

Notes:

- To locate the receivers referred to in Table 2 refer to Appendix 3.
- After the first review on any EPL granted for this development under Section 78 of the POEO Act, nothing in this consent prevents the EPA from imposing stricter noise limits on the quarrying operations on site under the EPL.

Appendix 5 sets out the metrological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner/s to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

Construction Noise

- The Applicant **must** manage noise generated during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road, in accordance with the guidelines specified in Table 2 of the *Interim Construction Noise Guideline*.

Note: Management guidelines are applicable to receivers 3 and 4, shown in Appendix 3.

Noise Bunds

4. The Applicant must ensure that the noise bund adjacent to the northern boundary of the extraction area is constructed prior to the commencement of quarrying operations in the extension area.
- 4A. The Applicant must ensure that the noise bund adjacent to Greendale Road is constructed prior to the commencement of brick making operations.

Operating Conditions

5. The Applicant **must**:
 - (a) implement all reasonable and feasible mitigation measures to minimise construction, operational and road noise of the development;
 - (b) implement periods of respite during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road;
 - (c) regularly assess noise monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the noise criteria in this consent;
 - (d) maintain the effectiveness of noise suppression equipment on plant and equipment on site;
 - (e) minimise the noise impacts of the development during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 5); and
 - (f) carry out regular noise monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.

Noise Management Plan

6. The Applicant **must** prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (c) describe the reasonable and feasible mitigation measures that would be implemented to ensure:
 - construction noise is minimise;
 - compliance with the relevant noise criteria and operating conditions in this consent;
 - best management practice is being employed; and
 - the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;
 - (d) describe the proposed noise management system on site; and
 - (e) include a quarterly (or as otherwise agreed with the Secretary) noise monitoring program that:
 - uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent;
 - evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and
 - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

AIR QUALITY

Air Quality Criteria

7. The Applicant **must** implement all reasonable and feasible avoidance and mitigation measures so that particulate matter emissions generated by the development do not exceed the criteria in Tables 3 to 6 at any residence on privately-owned land.

Table 3: Long-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Total suspended particulates (TSP)	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 4: Short-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 5: Long-Term Criteria for Deposited Dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Table 6: Long and Short-Term Stack Emissions

Pollutant	Averaging period	^d Criterion
Sulphur Dioxide	10-minute	712 µg/m ³
	1-Hour	570 µg/m ³
	24-Hour	228 µg/m ³
	Annual	60 µg/m ³
Nitrogen Dioxide	1-Hour	246 µg/m ³
	Annual	62 µg/m ³
Hydrogen Chloride	1 hour	0.14 mg/m ³

Notes to Tables 3-6:

- ^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).
- ^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).
- ^c 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, illegal activities or any other activity agreed by the Secretary in consultation with EPA.

Operating Conditions

8. The Applicant **must**:
 - (a) implement all reasonable and feasible measures to minimise the stack and dust emissions of the development;
 - (b) minimise surface disturbance and maximise progressive rehabilitation;
 - (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note (d) to Tables 3-6 above); and
 - (d) monitor and report on compliance with the relevant air quality conditions in this consent; to the satisfaction of the Secretary.

Air Quality Management Plan

9. The Applicant **must** prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (c) describe the measures that would be implemented to ensure:
 - compliance with the air quality criteria and operating conditions under this consent;
 - best practice management is being employed; and
 - the air quality impacts of the development are minimised during adverse meteorological conditions;
 - (d) describe the air quality management system; and
 - (e) include an air quality monitoring program that:
 - evaluates and reports on:
 - the effectiveness of the air quality management system; and
 - compliance with the air quality criteria and operating conditions; and
 - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

METEOROLOGICAL MONITORING

10. For the life of the development, the Applicant **must** ensure that there is a suitable meteorological station operating in the vicinity of the site that:
- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
 - (b) is capable of continuous measurement of stability class, in accordance with the *NSW Industrial Noise Policy*, or as otherwise approved by EPA.

TRANSPORT

Monitoring of Product Transport

11. The Applicant **must** keep accurate records of the:
- (a) **tonnage** of bricks transported from the site (monthly and annually);
 - (b) amount of raw material imported to the site (monthly and annually); and
 - (c) **tonnage of each type of raw materials imported to the site (monthly and annually);** and provide the Secretary with a summary of this information upon request.

Parking

12. The Applicant **must** provide sufficient parking on-site for all development-related traffic, in accordance with Camden Council's parking codes, to the satisfaction of the Secretary.

Operating Conditions

13. The Applicant **must** ensure that:
- (a) all development-related heavy vehicles enter and exit the site in a forward direction;
 - (b) all laden vehicles entering or exiting the site have their loads covered (with the exception of vehicles carrying bricks);
 - (c) all laden vehicles that have accessed the extraction and/or stockpile areas are cleaned of sand and other material that may fall on the road, before leaving the site;
 - (d) all heavy vehicles exiting the site travel east of the site along Greendale Road to The Northern Road and/or Bringelly Road;
 - (e) the dispatch of laden trucks is avoided during the peak drop-off and pick-up times at the Bringelly Public School to the greatest extent practicable, particularly prior to the upgrade of the Greendale Road/Bringelly Road intersection by RMS; and
 - (f) no trucks queue at the entrance to the site before 6am.

Access Road Intersection Construction

14. Within 12 months of commencing development under this consent, unless otherwise agreed with the Secretary, the Applicant must design and construct the new site access road intersection with Greendale Road in accordance with applicable AUSTROADS standards, to the satisfaction of Camden Council. The Applicant must notify the Secretary in writing within 30 days of obtaining Council approval.

Within 7 days of completing construction and the new site access road being operational, the existing site access road must be permanently closed.

Transport Management Plan

15. The Applicant **must** prepare a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with RMS, Camden Council, Liverpool City Council and Bringelly Public School, and be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (b) describe the measures that would be implemented to ensure compliance with the transport operating conditions under this consent, including specific measures to avoid **the arrival and**

- dispatch of laden trucks from the site during the peak drop-off and pick-up times at the Bringelly Public School;
- (c) include a Code of Conduct for heavy vehicle drivers that addresses:
- travelling speeds;
 - procedures to minimise noise including a regular Truck Noise Auditing Program;
 - procedures to minimise diesel exhaust emissions;
 - instructions to avoid grouping or convoying of trucks;
 - procedures to ensure that drivers adhere to the designated haulage routes and the haulage hours permitted under this consent;
 - instructions to drivers not to overtake each other on the haulage route, as far as practicable, and to maintain appropriate distances between vehicles; and
 - instruction to drivers to be properly safety conscious and to strictly obey all traffic regulations, particularly in relation to school zones along Greendale Road; and
- (d) describe the measures that would be put in place to ensure compliance with the drivers' Code of Conduct and include a program to monitor the effectiveness of the implementation of these measures.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

SOIL AND WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater.

Water Supply

16. The Applicant **must** ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply to the satisfaction of the Secretary.

Water Discharges

17. The Applicant **must** comply with the discharge limits in any EPL or with Section 120 of the POEO Act.

Water Management Plan

18. The Applicant **must** prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified person/s approved by the Secretary;
 - (b) be prepared in consultation with the EPA and **DPI Water**;
 - (c) be submitted to the Secretary for approval **prior to the commencement of development under this consent**, unless the Secretary agrees otherwise;
 - (d) include a Site Water Balance that:
 - includes details of:
 - quantity of water required to support operations;
 - sources and security of water supply;
 - water use and management on site;
 - reporting procedures; and
 - measures to be implemented to minimise potable water use on site;
 - (e) include a Surface Water Management Plan, that includes:
 - baseline data on surface water flows and quality in the watercourses that could be affected by the development;
 - a description of the surface water management system on site, including:
 - clean water diversions;
 - erosion and sediment controls;
 - the dirty water management system; and
 - water storages (addressing maximum harvestable rights if applicable);
 - performance criteria, including trigger levels for investigating any potentially adverse surface water quality impacts;
 - a program to monitor and report on:
 - any surface water discharges;

- the effectiveness of the water management system; and
 - surface water flows and quality in local watercourses;
 - a plan to respond to any exceedances of the performance criteria.
- (f) a Groundwater Management Plan, which includes:
- baseline data on groundwater levels, yield and quality in surrounding aquifers;
 - groundwater assessment and performance criteria, including trigger levels for investigating potentially adverse groundwater impacts;
 - a program to monitor:
 - groundwater inflows to the quarry pit; and
 - impacts of the development on surrounding aquifers;
 - an analysis of the monitoring results to determine long-term water levels within the quarry void; and
 - a plan to respond to any exceedances of the performance criteria.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

BIODIVERSITY

Biodiversity Offset Strategy

19. The Applicant **must** implement the Biodiversity Offset Strategy described in the EIS, as summarised in Table 7 and shown conceptually in Appendix 4, to the satisfaction of the Secretary.

Table 7: Summary of the Biodiversity Offsets

Area	Offset Criteria	Size (Ha)
On-site offset	Existing vegetation to be enhanced to establish an area of native woodland comprising species associated with Cumberland Plain Woodland.	1.93

Security of Offsets

20. Within 2 years of **notifying the Department of commencement of development (see condition 8 of Schedule 2)**, unless otherwise agreed with the Secretary, the Applicant **must** make suitable arrangements to provide appropriate long-term security for the offset area, to the satisfaction of the Secretary.

Note: Mechanisms to provide appropriate long term security to the land within the Biodiversity Offset Strategy include a Biobanking Agreement, Voluntary Conservation Agreement or an alternative mechanism that provides for a similar conservation outcome. Any mechanism must remain in force in perpetuity.

Biodiversity Management Plan

21. The Applicant **must** prepare a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the OEH and Camden Council;
 - (b) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - (c) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;
 - (d) describe the short, medium, and long term measures that would be implemented to:
 - manage the remnant vegetation and habitat on the site and in the offset area and;
 - implement the biodiversity offset strategy, including detailed performance and completion criteria;
 - (e) include performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);
 - (f) include a description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
 - maximising the salvage of resources within the approved disturbance area - including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;

- minimising the impacts on fauna on site, including pre-clearance surveys and minimising the potential exposure to tailings;
 - controlling weeds and feral pests;
 - controlling erosion;
 - controlling access; and
 - bushfire management;
- (g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
- (h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

Conservation Bond

22. Within 6 months of the approval of the Biodiversity Management Plan, the Applicant **must** lodge a conservation bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.

The sum of the bond **must** be determined by:

- a. calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and
- b. employing a suitably qualified quantity surveyor to verify the calculated costs,
- c. to the satisfaction of the Secretary.

The calculation of the conservation bond must be submitted to the Department for approval at least 1 month prior to lodgement of the final bond.

If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.

If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.

Notes:

- *Alternative funding arrangements for long term management of the biodiversity offset strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to conservation reserve estate (or any other mechanism agreed with OEH) can be used to reduce the liability of the conservation bond.*
- *The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy or the completion of major milestones within the approved plan.*

REHABILITATION

Rehabilitation Objectives

23. The Applicant **must** rehabilitate the site to the satisfaction of the Secretary. Rehabilitation must:
- a. comply with the objectives in Table 8; and
 - b. be generally consistent with the proposed rehabilitation strategy in the EIS, and the final land form shown conceptually in Appendix 4 (unless modified by the Final Land Use Options Plan, prepared in accordance with condition 25 of this consent).

Table 8: Rehabilitation Objectives

Feature	Objective
Site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native species and habitat

Surface infrastructure	<ul style="list-style-type: none"> To be decommissioned and removed (unless the Secretary agrees otherwise)
Final void	<ul style="list-style-type: none"> Minimise the size, depth and slope of the batters of the final void Minimise the drainage catchment of the final void
Quarry pit floor	<ul style="list-style-type: none"> Landscaped and revegetated using native flora species, above the anticipated final void water level
Community	<ul style="list-style-type: none"> Ensure public safety

Progressive Rehabilitation

24. The Applicant **must** rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible 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.

Final Land Use Options Plan

25. The Applicant **must** prepare a Final Land Use Options Plan for the site to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with DRE and Camden Council;
 - be submitted to the Secretary for approval within 2 years of the date of [notifying the Department of commencement of development \(see condition 8 of Schedule 2\)](#), unless the Secretary agrees otherwise;
 - provide details of the conceptual final landform and associated final land uses for the site;
 - ensure that the conceptual final land form is compatible with surrounding land uses, and is consistent with the rehabilitation objectives in Table 8 and the objectives of the Growth Centres SEPP for the South West Growth Centre;
 - inform the Rehabilitation Management Plan (prepared in accordance with condition 26 of this consent); and
 - be reviewed every 7 years to account for applicable land use priorities, and if necessary updated.

Rehabilitation Management Plan

26. The Applicant **must** prepare a Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH, DRE, [DPI Water](#) and Camden Council;
 - be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - provide details of the conceptual final landform and associated land uses for the site (which must be consistent with the Final Land Use Options Plan under condition 25 of this consent);
 - describe the short, medium and long term measures that would be implemented to:
 - manage remnant vegetation and habitat on site; and
 - ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
 - include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, including triggers for any necessary remedial action;
 - include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; and
 - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

[The Applicant must implement the approved management plan as approved from time to time by the Secretary.](#)

Note: The Rehabilitation Management Plan must be reviewed, and if necessary updated, following any update of the Final Land Use Options Plan.

HERITAGE

Heritage Management Plan

27. The Applicant **must** prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH;
 - (a) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - b. describe the measures that would be implemented to:
 - manage identified heritage objects, previously unidentified heritage objects or the discovery of any human remains on site;
 - ensure ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal cultural heritage values on site; and
 - protect sites identified adjacent to the development.

The Applicant **must** implement the approved management plan as approved from time to time by the Secretary.

VISUAL

28. The Applicant **must** establish a vegetation screen on both noise bunds, as soon as practicable after construction of the bunds, to minimise visibility of site infrastructure from outside the development area. Following establishment, the Applicant **must** maintain the vegetation screen, to the satisfaction of the Secretary.
29. The Applicant **must**:
- implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development; and
 - b) ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version.

BUSHFIRE MANAGEMENT

30. The Applicant **must**:
- ensure that the development is suitably equipped to respond to any fires on site; and
 - b) assist the Rural Fire Service, emergency services and National Parks and Wildlife Service as much as practicable if there is a fire in the surrounding area.

WASTE

31. Prior to importing onto the site any material that may be classified as a waste under the EPA *Waste Classification Guidelines 2009* (or its latest version), the Applicant must obtain a 'resource recovery exemption' under the POEO Act and provide evidence of this exemption to the Department.

Note: This condition does not apply to routine deliveries to the site.

32. The Applicant **must**:
- manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Camden Council; and
 - b) pump all sewage generated and stored on-site to a sewage treatment facility, unless otherwise agreed with the Secretary.
33. The Applicant **must**:
- minimise the waste generated by the development;
 - b) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
 - c) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. As soon as practicable after obtaining monitoring results showing an exceedance of any relevant criteria in schedule 3, the Applicant **must** notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria.

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant **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 development is complying with the relevant criteria in schedule 3;
 - if the development is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.

The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.

Adaptive Management

2. The Applicant must assess and manage development-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 consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.

Management Plan Requirements

3. The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:

- impacts and environmental performance of the development; and
- effectiveness of any management measures (see (c) above);
- (e) a contingency plan to manage any unpredicted impacts and their consequences;
- (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
- (g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Annual Review

4. By the end of September each year, the Applicant [must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary](#). This review must:
 - (a) describe the development (including rehabilitation) that was carried out in the previous [financial](#) year, and the development that is proposed to be carried out over the current [financial](#) year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous [financial](#) year, which includes a comparison of these results against:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years; and
 - the relevant predictions in the [documents in condition 2\(a\) of Schedule 2](#);
 - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the current [financial](#) year to improve the environmental performance of the development.

Revision of Strategies, Plans and Programs

5. [Within 3 months of the submission of an:](#)
 - (a) [Annual Review under condition 4 above;](#)
 - (b) [incident report under condition 7 below;](#)
 - (c) [audit report under condition 9 below; and](#)
 - (d) [any modifications to this consent,](#)
 the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.

Note: 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 development.

Community Consultative Committee

6. The Applicant [must](#) establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the [Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments](#) (Department of Planning, 2007, or its latest version), and be operating [prior to the commencement of development under this consent](#).

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*

- In accordance with the guideline, the Committee should comprise an independent chair and appropriate representation from the Applicant, Camden Council and the local community.

REPORTING

Incident Reporting

7. The Applicant **must** immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant **must** provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

8. The Applicant **must** provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

INDEPENDENT ENVIRONMENTAL AUDIT

9. Within a year of **commencing development under this consent**, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant **must** commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licence (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategy, plan or program required under these approvals;
 - (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals; **and be conducted and reported to the satisfaction of the Secretary.**

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

10. Within **12 weeks of commencing** this audit, unless the Secretary agrees otherwise, the Applicant **must** submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.

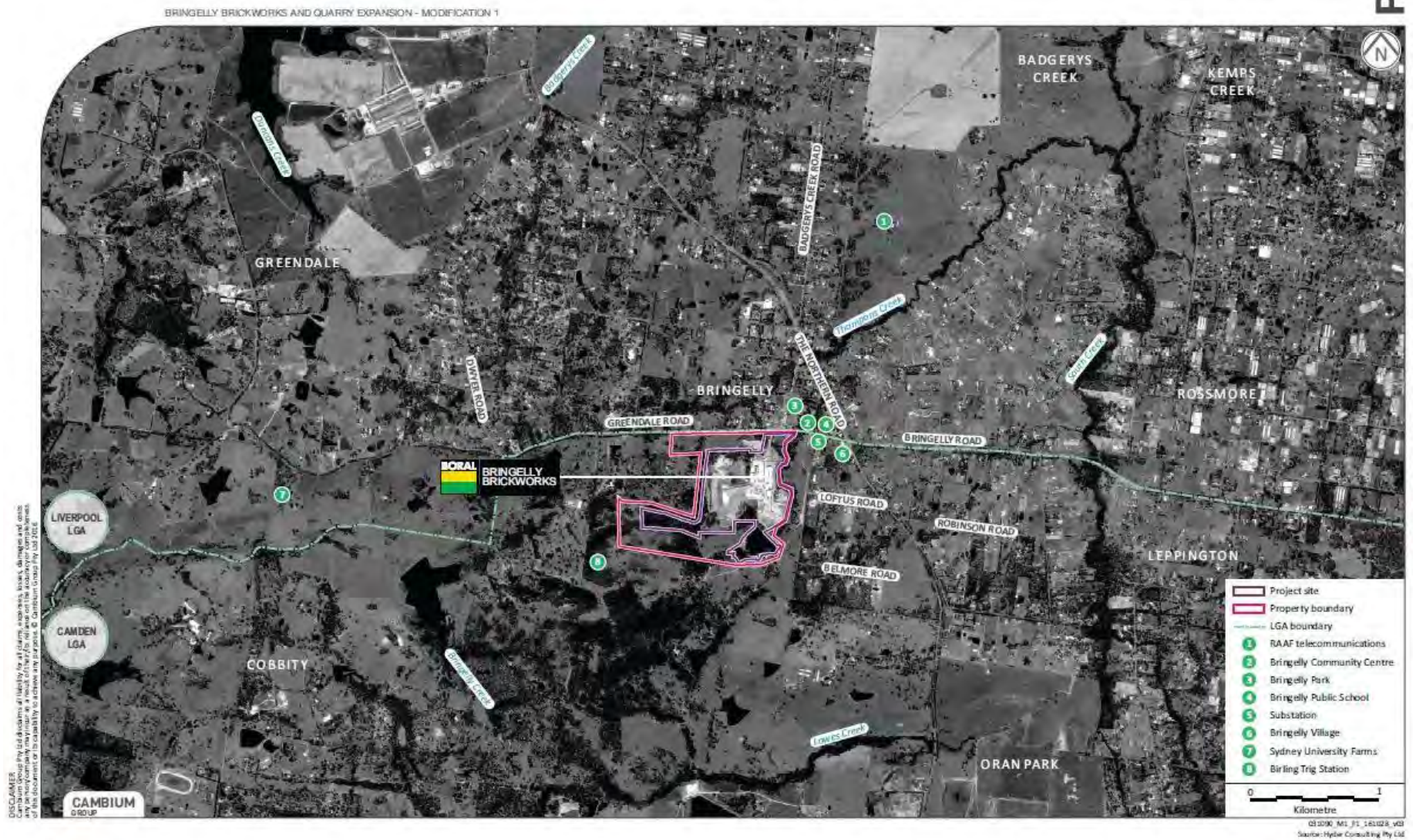
Within 7 days of commencing the audit, the Applicant must notify the Department in writing of the commencement of the audit.

ACCESS TO INFORMATION

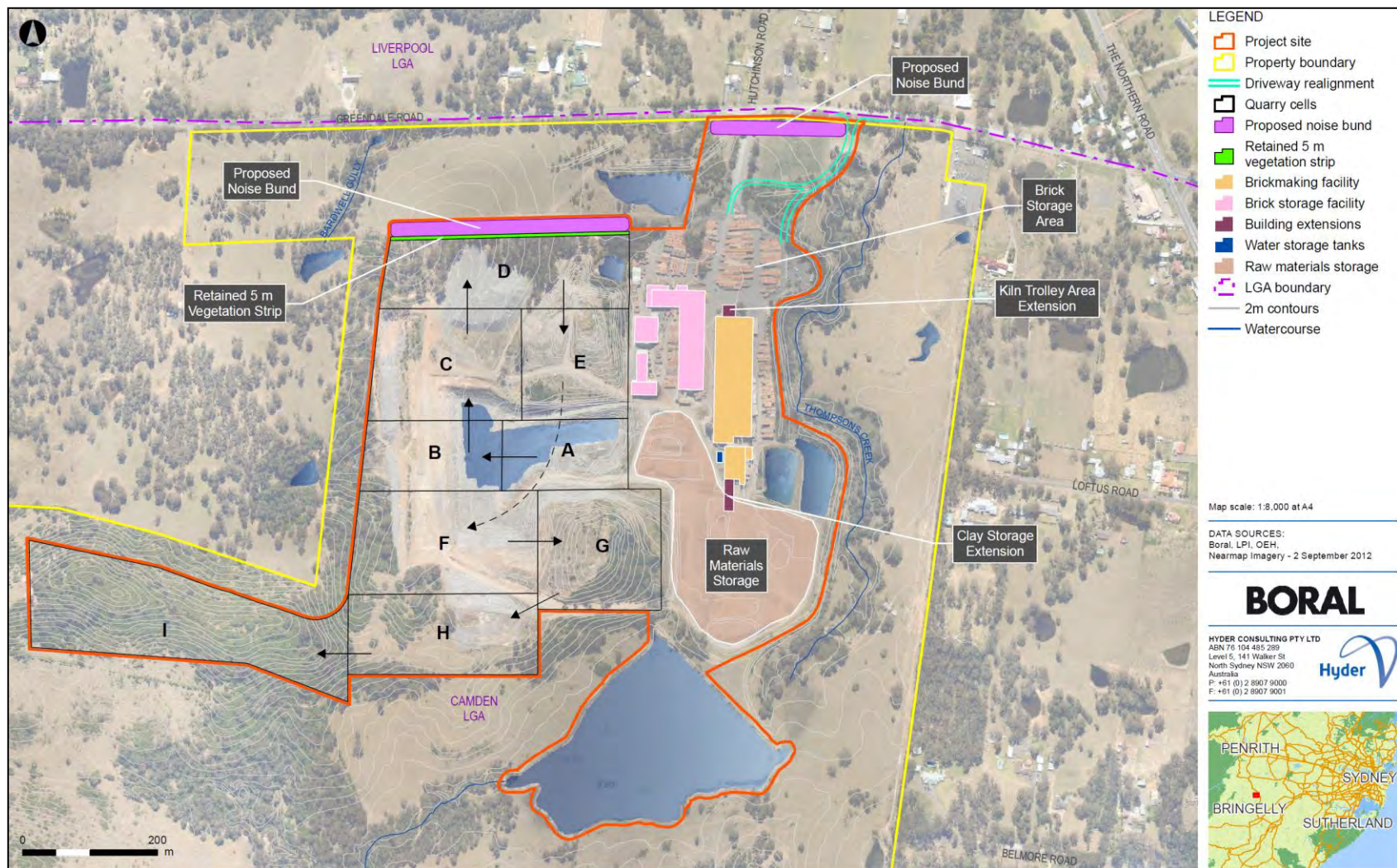
11. Within 6 months of **commencing development under this consent**, the Applicant **must**:
 - (a) make copies of the following publicly available on its website:
 - the documents in **condition 2(a) of Schedule 2**;
 - current statutory approvals for the development;
 - approved strategies, plans and programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - a complaints register, which is to be updated monthly;
 - minutes of CCC meetings;
 - the annual reviews of the development (for the last 5 years);
 - any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit;
 - any other matter required by the Secretary; and

(b) keep this information up-to-date,
to the satisfaction of the Secretary.

APPENDIX 1 DEVELOPMENT AREA



APPENDIX 2 DEVELOPMENT LAYOUT



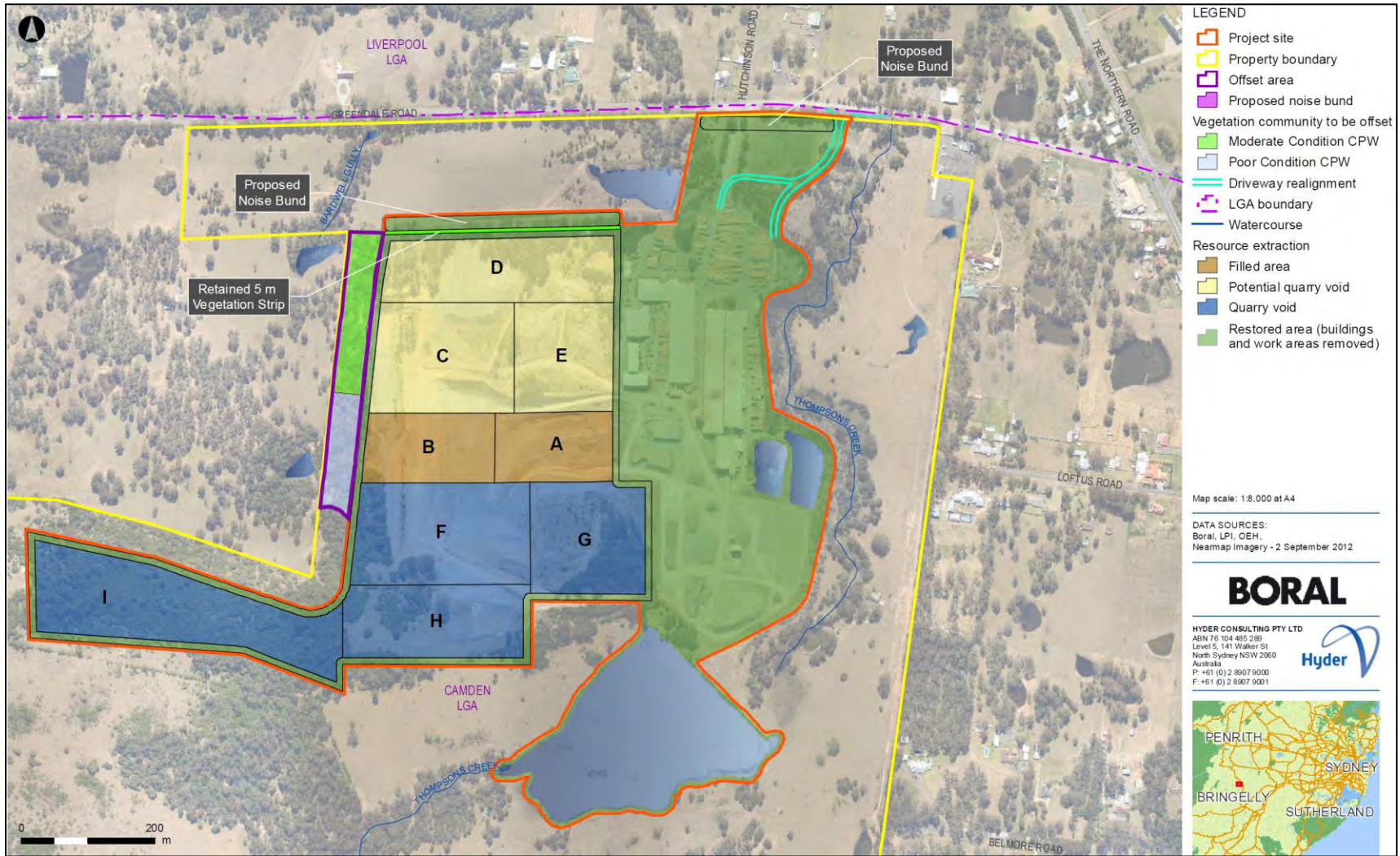
APPENDIX 3 RECEIVER LOCATIONS



Receiver number	Receiver address
1	55 Loftus Road
2	54 Loftus Road
3	20 Greendale Road
4	9 Greendale Road
5	5 Greendale Road (Bringelly Community Centre)
6	46 Loftus Road
7	36 Loftus Road
8	47 Loftus Road
9	37 Loftus Road
10	27 Loftus Road
11	26 Loftus Road
12	15 Loftus Road
13	5 Loftus Road
14	23 Greendale Road
15	27 Greendale Road
16	29 Greendale Road
17	25 Greendale Road
18	31 Greendale Road
19	35 Greendale Road
20	170 Tyson Road
21	196 Greendale Road
22	46 Belmore Road
23	55 Belmore Road
24	63 Belmore Road
25	67 Belmore Road
26	73 Belmore Road
27	83-85 Belmore Road
28	76 Belmore Road
29	86 Belmore Road
30	87 Belmore Road
31	93 Belmore Road
32	95-97 Belmore Road
33	107 Belmore Road
34	96 Belmore Road
35	108 Belmore Road
36	1037 Northern Road
37	10 Greendale Road
38	Bringelly Public School

APPENDIX 4

CONCEPTUAL FINAL LANDFORM AND BIODIVERSITY OFFSET STRATEGY



APPENDIX 5 NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Table 2 of the conditions are to apply under all meteorological conditions except the following:
 - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
 - (b) temperature inversion conditions between 1.5 °C and 3°C/100 m and wind speeds greater than 2 m/s at 10 m above ground level; or
 - (c) temperature inversion conditions greater than 3°C/100 m.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions **must** be that recorded by the meteorological station on or in the vicinity of the site.

Compliance Monitoring

3. Unless directed otherwise by the Secretary, quarterly attended monitoring is to be used to evaluate compliance with the relevant conditions of consent.

Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.

4. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
 - (a) monitoring locations for the collection of representative noise data;
 - (b) meteorological conditions during which collection of noise data is not appropriate;
 - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
 - (d) modifications to noise data collected including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

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Noise Monitoring Assessment

PGH Bringelly Brickworks
Bringelly, NSW
Quarter 2 Ending June 2021



Document Information

Noise Monitoring Assessment

PGH Bringelly Brickworks

Bringelly, NSW

Quarter 2 Ending June 2021

Prepared for: PGH Bricks & Pavers Pty Ltd

Greendale Road

Bringelly NSW 2256



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1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has been commissioned by PGH Bricks & Pavers Pty Ltd (PGH) to complete a Noise Monitoring Assessment (NMA) for the PGH Bringelly Brickworks (the 'site') at Greendale Road, Bringelly, NSW.

This assessment has been undertaken for the quarterly period ending June 2021, and forms part of the annual noise monitoring program to address conditions outlined in the Development Consent.

The NMA has quantified potential operational and sleep disturbance noise emissions from the operation and has been conducted in accordance with the following documents:

- NSW Environment Protection Authority (EPA), Noise Policy for Industry (NPI), 2017;
- Bringelly Brickworks Noise Management Plan (NMP ref BRK-BRI-NMP Version 4 dated 12.02.19), 2019;
- Bringelly Brickworks Development Consent, 2015 (SSD_5684); and
- Australian Standard AS 1055:2018 - Acoustics - Description and measurement of environmental noise.

A glossary of terms, definitions and abbreviations used in this report is provided in **Appendix A**.

The Development Consent is provided in **Appendix B**.

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2 Noise Criteria

The Bringelly Brickworks NMP outlines the applicable noise criteria for representative residential receivers surrounding the site and are presented in **Table 1**. The site includes the operation of a quarry and brickmaking plant, and as the quarry operates during the daytime, there are separate criteria relating to each period.

Table 1 Noise Criteria ¹				
Activity	Receiver	Day/Evening/Shoulder ^{2,3}	Night ²	
		dB LAeq(15min)	dB LAeq(15min)	dB LA1(max) ³
Brickmaking and quarrying	R1, R2	47	N/A	
	R3, R4, R14	46		
	R15, R17	45		
	All other receivers	44		
Brickmaking	All Receivers	44	43	53

Note 1: Noise criteria adopted from the Development Consent.

Note 2: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

Note 3: Periods and parameters as expressed in the Development Consent

Figure 1 presents the identified receiver locations and representative measurement locations.

Section 4 of the Bringelly Brickworks Development Consent, 2015 (SSD_5684) outlines requirements for Noise Bunds adjacent to the northern boundary of the extraction area and adjacent to Greendale Road. It is noted that the proposed new access road and associated noise bund adjacent to Greendale Road are not in place at the time of the monitoring. Further details on review of noise mitigation measures for the site are contained in a historic report (MAC190946LR1, 29 September 2019).



FIGURE 1
SITE LAYOUT
MAC190946-02
PGH Bringelly Brickworks

KEY

- Monitoring Locations
- Receivers



3 Assessment Methodology

The attended noise measurements were conducted in general accordance with the procedures described in Australian Standard AS 1055:2018, "Acoustics - Description and Measurement of Environmental Noise". Measurements were conducted using a Svantek Type 1, 971 noise analyser. The acoustic instrumentation used carries current NATA calibration and complies with AS IEC 61672.1-2019- Electroacoustics - Sound level meters - Specifications. Calibration of all instrumentation was checked prior to and following measurements. Drift in calibration did not exceed $\pm 0.5\text{dBA}$.

Noise measurements were of 15-minutes in duration and where possible, throughout each survey the operator quantified the contribution of each significant noise source. Measurements were conducted at five locations (N1, N3, N14, N20, N35) on Wednesday 14 April 2021, during the daytime, evening and night time periods to satisfy the requirements of the NMP.

Extraneous noise sources were excluded from the analysis to determine the $L_{Aeq}(15\text{min})$ quarry noise contribution for comparison against the relevant criteria. In the event of site attributed noise being above criteria, prevailing meteorological conditions for the monitoring period are analysed in accordance with Fact Sheet D of the NPI to determine the stability category present at the time of each attended measurement.

Where the site is inaudible, the contribution is estimated to be at least 10dBA below the ambient noise level.

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4 Results

4.1 Assessment Results - Location N1

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N1 for the NMA are presented in **Table 2**.

Table 2 Operator-Attended Noise Survey Results – Location N1

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
14/04/2021	15:47 (Day)	66	55	40	WD: NE WS: <0.1m/s Rain: Nil	Insects 30-35
						Birds 35-54
						Aircraft 40-62
						Local Traffic 53-66
						Distant Traffic 38-42
						PGH Inaudible
						PGH Site LAeq(15min) Contribution
14/04/2021	19:50 (Evening)	50	43	40	WD: N WS: <0.1m/s Rain: Nil	Insects 30-35
						Aircraft 32-38
						Distant Traffic 30-50
						Operator 63
						PGH Audible 30-37
						PGH Site LAeq(15min) Contribution
						14/04/2021
Dogs 45-61						
Local Traffic 45-60						
Distant Traffic 40-45						
PGH Audible 35-38						
PGH Site LAeq(15min) Contribution						

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.2 Assessment Results - Location N3

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N3 for the NMA are presented in **Table 3**.

Table 3 Operator-Attended Noise Survey Results – Location N3

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
14/04/2021	16:07 (Day)	77	65	49	WD: NE WS: 0.5m/s Rain: Nil	Birds 45-50
						Local Traffic 50-90
						Distant Traffic 45-48
						Insects 48-52
						PGH Inaudible
PGH Site LAeq(15min) Contribution						<40
14/04/2021	20:11 (Evening)	73	60	52	WD: NE WS: 0.5m/s Rain: Nil	Birds 45-56
						Local Traffic 55-79
						Distant Traffic 48-55
						Insects 40-50
						Dogs 45-50
PGH Inaudible						
PGH Site LAeq(15min) Contribution						<40
14/04/2021	22:39 (Night)	67	56	50	WD: N WS: <0.1m/s Rain: Nil	Distant Traffic 30-56
						Local Traffic 60-79
						Aircraft 45-50
						Frogs 48-50
						Dogs 45-48
PGH Audible 30-35						
PGH Site LAeq(15min) Contribution						<40

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.3 Assessment Results - Location N14

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N14 for the NMA are presented in **Table 4**.

Table 4 Operator-Attended Noise Survey Results – Location N14

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
14/04/2021	16:26 (Day)	77	65	43	WD: NE WS: 0.5m/s Rain: Nil	Insects 40-30
						Birds 44-52
						Local Traffic 60-87
						Distant Traffic 35-40
						Aircraft 35-57
						PGH Inaudible
						PGH Site LAeq(15min) Contribution
<35						
14/04/2021	20:31 (Evening)	76	62	40	WD: N WS: 0.5m/s Rain: Nil	Insects 30-35
						Local Traffic 58-88
						Distant Traffic 38-42
						Domestic Noise 50-56
						PGH Audible 30-40
						PGH Site LAeq(15min) Contribution
						36
14/04/2021	22:18 (Night)	70	56	41	WD: N WS: <0.1m/s Rain: Nil	Insects 34-35
						Distant Traffic 35-42
						Local Traffic 50-82
						PGH Audible 30-35
						Truck Leaving site (5 Seconds)
						43-53
						PGH Site LAeq(15min) Contribution
<35						

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.4 Assessment Results - Location N20

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N20 for the NMA are presented in **Table 5**.

Table 5 Operator-Attended Noise Survey Results – Location N20

Date	Time (hrs)	Descriptor (dBA re 20 μPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
14/04/2021	16:46 (Day)	79	65	37	WD: NE WS: 0.5m/s Rain: Nil	Local Traffic 60-86
						Aircraft 40-50
						Birds 45-48
						Insects <40
						PGH Inaudible
PGH Site LAeq(15min) Contribution						<35
14/04/2021	21:39 (Evening)	73	59	38	WD: N WS: <0.1m/s Rain: Nil	Dogs 30-35
						Insects 38-40
						Frogs 36-38
						Distant Traffic <35
						Local Traffic 60-83
Aircraft 45-53						PGH Inaudible
PGH Site LAeq(15min) Contribution						<35
14/04/2021	22:00 (Night)	70	59	37	WD: N WS: <0.1m/s Rain: Nil	Insects 32-36
						Dogs 38-42
						Local Traffic 45-48
						Distant Traffic 35-38
						PGH Inaudible
PGH Site LAeq(15min) Contribution						<35

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.5 Assessment Results - Location N35

The monitored noise level contributions and observed meteorological conditions for each assessment period at Location N35 for the NMA are presented in **Table 6**.

Table 6 Operator-Attended Noise Survey Results – Location N35

Date	Time (hrs)	Descriptor (dBA re 20 µPa)			Meteorology	Description and SPL, dBA
		LA1	LAeq	LA90		
14/04/2021	15:22 (Day)	54	43	32	WD: NW	Aircraft 32-54
					WS: <0.1m/s	Dogs 35-38
					Rain: Nil	Birds 38-40
						PGH reverse alarm
						(10 Seconds) <35
PGH Site LAeq(15min) Contribution						<35
14/04/2021	19:24 (Evening)	49	44	41	WD: N	Aircraft 38-45
					WS: <0.1m/s	Dogs 40-42
					Rain: Nil	Insects 38-41
						Local Traffic 43-49
						PGH Audible 30-35
PGH Site LAeq(15min) Contribution						<35
14/04/2021	23:22 (Night)	53	49	47	WD: N	Insects 38-40
					WS: <0.1m/s	Frogs 38-45
					Rain: Nil	Dogs 35-38
						Operator 42-59
						PGH Audible 30-35
PGH Site LAeq(15min) Contribution						<35

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

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5 Discussion

Monitoring on Wednesday 14 April 2021 identified site noise was audible during all periods at monitoring location N35. Site noise was audible during at least one period at monitoring locations N1, N3 and N14. Site contributions were not audible during any period at monitoring location N20. Site attributable noise contributions were estimated to satisfy the relevant noise criteria at all locations during all assessment periods.

Audible site noise sources included the combustion fan and trucks entering the site on the access road. Extraneous noise sources measured included insects, birds, traffic, aircraft noise and dogs barking.

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6 Conclusion

Muller Acoustic Consulting Pty Ltd (MAC) has completed a Noise Monitoring Assessment (NMA) PGH Bricks & Pavers Pty Ltd (PGH) at the PGH Bringelly Brickworks (the 'site') at Greendale Road, Bringelly, NSW. The assessment was completed to assess the site's compliance with the relevant noise criteria during Quarter 2, ending June 2021.

Attended noise monitoring was undertaken on Wednesday 14 April 2021 at five representative receiver locations. The assessment has identified that noise emissions generated by Bringelly Brickworks were occasionally audible, however quarry noise emissions were below the relevant noise criteria throughout the survey period, satisfying the relevant consent conditions.

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Appendix A – Glossary of Terms

A number of technical terms have been used in this report and are explained in **Table A1**.

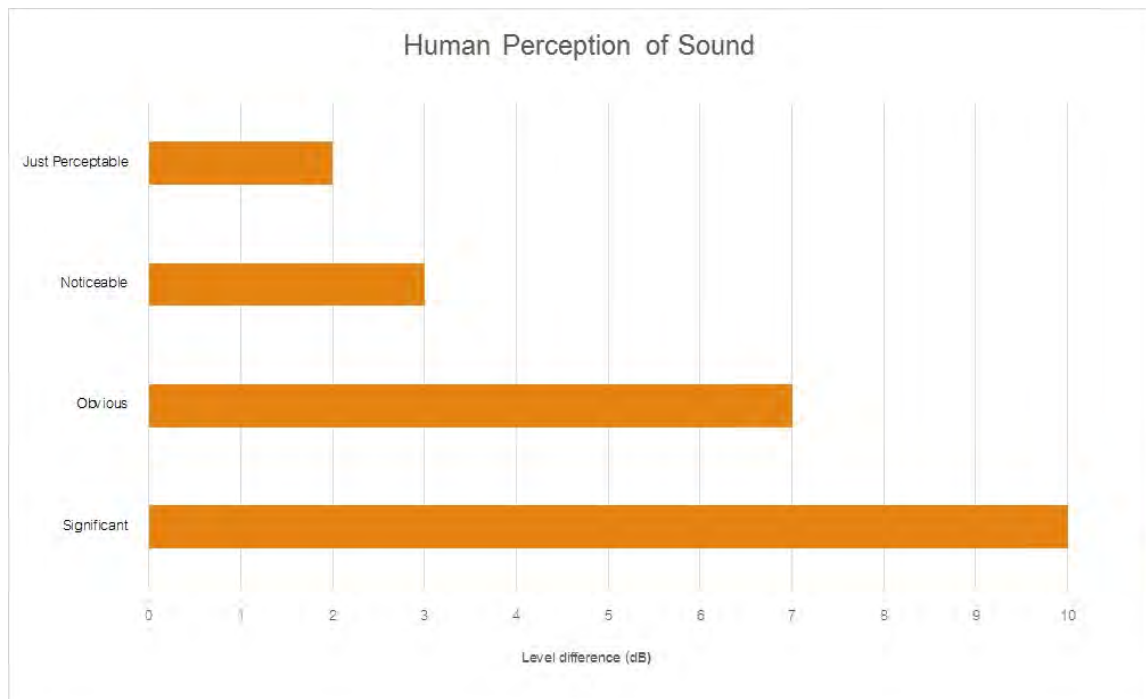
Table A1 Glossary of Acoustical Terms	
Term	Description
1/3 Octave	Single octave bands divided into three parts
Octave	A division of the frequency range into bands, the upper frequency limit of each band being twice the lower frequency limit.
ABL	Assessment Background Level (ABL) is defined in the NPI as a single figure background level for each assessment period (day, evening and night). It is the tenth percentile of the measured L90 statistical noise levels.
Ambient Noise	The total noise associated with a given environment. Typically, a composite of sounds from all sources located both near and far where no particular sound is dominant.
A Weighting	A standard weighting of the audible frequencies designed to reflect the response of the human ear to sound.
Background Noise	The underlying level of noise present in the ambient noise, excluding the noise source under investigation, when extraneous noise is removed. This is usually represented by the LA90 descriptor
dBA	Noise is measured in units called decibels (dB). There are several scales for describing noise, the most common being the 'A-weighted' scale. This attempts to closely approximate the frequency response of the human ear.
dB(Z), dB(L)	Decibels Z-weighted or decibels Linear (unweighted).
Extraneous Noise	Sound resulting from activities that are not typical of the area.
Hertz (Hz)	The measure of frequency of sound wave oscillations per second - 1 oscillation per second equals 1 hertz.
LA10	A sound level which is exceeded 10% of the time.
LA90	Commonly referred to as the background noise, this is the level exceeded 90% of the time.
LAeq	Represents the average noise energy or equivalent sound pressure level over a given period.
LAmx	The maximum sound pressure level received at the microphone during a measuring interval.
Masking	The phenomenon of one sound interfering with the perception of another sound. For example, the interference of traffic noise with use of a public telephone on a busy street.
RBL	The Rating Background Level (RBL) as defined in the NPI, is an overall single figure representing the background level for each assessment period over the whole monitoring period. The RBL, as defined is the median of ABL values over the whole monitoring period.
Sound power level (Lw or SWL)	This is a measure of the total power radiated by a source in the form of sound and is given by $10 \cdot \log_{10} (W/W_0)$. Where W is the sound power in watts to the reference level of 10^{-12} watts.
Sound pressure level (Lp or SPL)	the level of sound pressure; as measured at a distance by a standard sound level meter. This differs from Lw in that it is the sound level at a receiver position as opposed to the sound 'intensity' of the source.

Table A2 provides a list of common noise sources and their typical sound level.

Table A2 Common Noise Sources and Their Typical Sound Pressure Levels (SPL), dBA

Source	Typical Sound Pressure Level
Threshold of pain	140
Jet engine	130
Hydraulic hammer	120
Chainsaw	110
Industrial workshop	100
Lawn-mower (operator position)	90
Heavy traffic (footpath)	80
Elevated speech	70
Typical conversation	60
Ambient suburban environment	40
Ambient rural environment	30
Bedroom (night with windows closed)	20
Threshold of hearing	0

Figure A1 – Human Perception of Sound



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Appendix B – Development Consent

Development Consent

Section 89E of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I approve the development application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.

David Kitto
Executive Director
Resource Assessments and Business Systems

Sydney

2015

SCHEDULE 1

Application Number:

SSD_5684

Applicant:

Boral Bricks Pty Ltd

Consent Authority:

Minister for Planning

Land:

[Lot 100 in DP 1203966](#)

Development:

Bringelly Brickworks Extension Project

Modification 1 (October 2016 shown in [blue](#) text)

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DEFINITIONS

AHD	Australian Height Datum
Annual Review	The review required by condition 4 of schedule 5
Applicant	Boral Bricks Pty Ltd, or any other person or persons who rely on this consent to carry out the development that is subject to this consent
BCA	Building Code of Australia
Biodiversity offset strategy	The conservation and enhancement strategy described in the EIS, and shown conceptually in Appendix 4
Brick making operations	Includes the receipt, handling, processing, storage and transportation of raw materials on site, brick making on site and transportation of finished bricks on site
CCC	Community Consultative Committee
Conditions of consent	Conditions contained in schedules 1 to 5 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this consent
CPI	Australian Bureau of Statistics Consumer Price Index
Date of commencement	The date notified to the Department by the Applicant under condition 8 of Schedule 2
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Environment
Development	The development described in the documents of condition 2(a) of Schedule 2
Development area	All land to which the development application applies, as listed under "Land" in schedule 1 and shown in Appendix 1
DPI Water	Department of Primary Industries - Water
DRE	Division of Resources and Energy, within the NSW Department of Industry
EEC	Endangered Ecological Community, as defined under the <i>Threatened Species Conservation Act 1995</i>
EIS	Environmental Impact Statement titled <i>Bringelly Brickworks and Quarry Expansion</i> (2 volumes), dated September 2013, as modified by the Response to Submissions titled, <i>Bringelly Brickworks and Quarry Expansion, Response to Submissions</i> dated February 2014 and the letter entitled <i>Bringelly Brickworks – Biodiversity Offsets</i> , dated 2 June 2014
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence under the POEO Act
Evening	The period from 6pm to 10pm
Extension area	The area outside of the existing quarry footprint (i.e. cells D, E, F, G, H and I, as shown conceptually in Appendix 2)
Feasible	Feasible relates to engineering considerations and what is practical to build
GDE	Groundwater Dependent Ecosystem
GPS	Global Positioning System
Growth Centres SEPP	<i>State Environmental Planning Policy (Sydney Regional Growth Centres) 2006</i>
Ha	Hectare
Incident	A set of circumstances that: <ul style="list-style-type: none"> causes or threatens to cause material harm to the environment; and/or breaches or exceeds the limits or performance measures/criteria in this consent
Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in schedules 3 and 4 of this consent

	where it is defined to mean the whole of a lot, or contiguous lots, owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this consent
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
m	Metres
Minister	Minister for Planning, or delegate
Mitigation	Activities associated with reducing the impacts of the development
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NP&W Act	<i>National Parks and Wildlife Act 1974</i>
OEH	NSW Office of Environment and Heritage
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Privately-owned land	Land that is not owned by a public agency or the Applicant (or its subsidiary)
Quarrying operations	Includes the removal of overburden and extraction, handling, storage and transportation of extractive materials on site
Raw materials	Raw materials imported for use in brick making including clay/shale and additives (such as manganese and iron oxides)
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The restoration of land disturbed by the development to a good condition, ensuring that it is safe, stable and non-polluting and appropriately revegetated
RMS	Roads and Maritime Services
Secretary	Secretary of the Department, or nominee
SEE (Mod 1)	Statement of Environmental Effects titled ' <i>Section 96(1A) Modification Supporting Information</i> ' dated August 2016 and prepared by Element Environment, including the Response to Submissions document dated September 2016
Site	The land listed under "Land" in schedule 1
Shoulder	The period between 6am to 7am on Monday to Saturday
South West Growth Centre	An area of land identified under the Growth Centres SEPP

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this consent, the Applicant **must** implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation, or rehabilitation of the development.

TERMS OF CONSENT

2. The Applicant **must**:
 - (a) carry out the development generally in accordance with the EIS **and SEE (Mod 1)**; and
 - (b) the conditions of this consent.

Note: The general layout of the development is shown in Appendix 2.

3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
4. The Applicant **must** comply with any reasonable requirement/s of the Secretary arising the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent;
 - (b) any reports, reviews or audits commissioned by the Department regarding compliance with this consent; or
 - (c) the implementation of any actions or measures contained in these documents.

LIMITS ON CONSENT

Quarrying and Brick Making Operations

5. The Applicant may carry out quarrying **operations** and brick making operations from the date of commencement of development under this consent until 1 March 2045.

Note: Under this consent, the Applicant is required to rehabilitate the site and carry out additional undertakings to the satisfaction of the Secretary. Consequently, this consent will continue to apply in all other respects other than the right to conduct quarrying operations until the rehabilitation of the site and those undertakings have been carried out to a satisfactory standard.

Production Limits

6. The Applicant **must** not:
 - (a) extract more than 200,000 tonnes of clay/shale from the site in any calendar year;
 - (b) produce more than 263,500 tonnes of bricks at the site in any calendar year;
 - (c) carry out quarrying operations beyond 46 m AHD; and
 - (d) receive more than **321,000** tonnes of raw materials required for brick making to the site in any calendar year.

Transportation Limits

7. The Applicant **must** not:
 - (a) transport more than 263,500 tonnes of bricks from the site in a calendar year;
 - (b) receive more than 90 trucks to the site per day or more than 18 trucks per hour; and
 - (c) dispatch more than 90 trucks from the site per day or more than 18 trucks per hour.

NOTIFICATION OF COMMENCEMENT

8. **Prior to commencing development under this consent, the Applicant must notify the Department in writing of the date on which it will commence development permitted under this consent.**

SURRENDER OF EXISTING DEVELOPMENT CONSENT

9. Within 4 months of commencing development under this consent, the Applicant must surrender the development consent (DA 91/1194) for existing operations on the site in accordance with Section 104A of the EP&A Act.

Following the commencement of development under this consent, the conditions of this consent (including any notes) shall prevail to the extent of any inconsistency with the conditions of the existing development consent (DA 91/1194).

STRUCTURAL ADEQUACY

10. The Applicant must ensure that any new buildings and structures, and any alterations, or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

DEMOLITION

11. The Applicant must ensure that all demolition work on site is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

PROTECTION OF PUBLIC INFRASTRUCTURE

12. The Applicant must:
- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Note: This condition does not apply to any damage to roads caused as a result of general road usage.

OPERATION OF PLANT AND EQUIPMENT

13. The Applicant must ensure that all plant and equipment used on site or any monitoring equipment used off site for monitoring the performance of the development is:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

UPDATING AND STAGING STRATEGIES, PLANS OR PROGRAMS

14. With the approval of the Secretary, the Applicant may submit any strategies, plans or programs required by this consent on a progressive basis.

To ensure the strategies, plans or programs under the conditions of this consent are updated on a regular basis, the Applicant may at any time submit revised strategies, plans or programs to the Secretary for approval.

With the agreement of the Secretary, the Applicant may prepare any revised strategy, plan or program without undertaking consultation with all parties under the applicable condition of this consent.

Notes:

- While any strategy, plan or program may be submitted on a progressive basis, the Applicant must ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.
- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.

15. Until they are replaced by an equivalent strategy, plan or program approved under this consent, the Applicant **must** implement the existing strategies, plans or programs for the site that have been approved under DA 91/1194.

IDENTIFICATION OF APPROVED LIMITS OF EXTRACTION

16. Prior to undertaking quarrying operations in the extension area, the Applicant **must**:
- (a) engage a registered surveyor to mark out the boundaries of the approved limits of extraction within the development area; and
 - (b) submit a survey plan of these boundaries with applicable GPS coordinates to the Secretary.
17. While quarrying operations are being carried out, the Applicant **must** ensure that these boundaries are clearly marked at all times to allow operating staff and inspecting officers to clearly identify the approved limits of extraction.

PRODUCTION DATA

18. The Applicant **must**:
- (a) provide annual quarry production data to DRE using the standard form for that purpose; and
 - (b) include a copy of this data in the Annual Review (see condition 4 of schedule 5).

DEVELOPER CONTRIBUTIONS

19. The Applicant **must** pay Camden Council road maintenance contributions of \$0.0811 for every tonne of material transported to and from the site, indexed to CPI. Each payment must be:
- (a) paid to Council at the end of each calendar year; and
 - (b) based on weighbridge records of all supplementary brick making materials transported to the site and bricks and spoil transported from the site.

Note: If the parties are not able to agree on any aspect of the maintenance contributions, either party may refer the matter to the Secretary for resolution.

SCHEDULE 3 ENVIRONMENTAL PERFORMANCE CONDITIONS

HOURS OF OPERATION

- The Applicant **must** comply with the operating hours set out in Table 1.

Table 1: Operating Hours

Activity	Operating Hours
<ul style="list-style-type: none"> Quarrying operations Deliveries Dispatch of finished bricks 	6am to 6pm, Monday to Friday 6am to 1pm, Saturday No activities on Sundays or Public Holidays
Brick making operations (except dispatch of finished bricks)	24 hours a day, 7 days a week
Construction activities	7am to 6pm, Monday to Friday 8am to 1pm, Saturday No construction to be undertaken on Sundays or Public Holidays

NOISE

Noise Criteria

- The Applicant **must** ensure that the noise generated by the development does not exceed the criteria in Table 2 at any residence on privately-owned land.

Table 2: Noise criteria dB(A)

Activity	Receiver	Day/Evening/Shoulder	Night	
		<i>L_{Aeq}(15 min)</i>	<i>L_{Aeq}(15 min)</i>	<i>L_{A1}(max)</i>
Brick making and quarrying	R1, R2	47	Not Applicable	
	R3, R4, R14	46		
	R15, R17	45		
	All other receivers	44		
Brick making	All receivers	44	43	53

Notes:

- To locate the receivers referred to in Table 2 refer to Appendix 3.
- After the first review on any EPL granted for this development under Section 78 of the POEO Act, nothing in this consent prevents the EPA from imposing stricter noise limits on the quarrying operations on site under the EPL.

Appendix 5 sets out the metrological conditions under which these criteria apply and the requirements for evaluating compliance with these criteria.

However, these criteria do not apply if the Applicant has a written agreement with the relevant landowner/s to generate higher noise levels, and the Applicant has advised the Department in writing of the terms of this agreement.

Construction Noise

- The Applicant **must** manage noise generated during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road, in accordance with the guidelines specified in Table 2 of the *Interim Construction Noise Guideline*.

Note: Management guidelines are applicable to receivers 3 and 4, shown in Appendix 3.

Noise Bunds

4. The Applicant must ensure that the noise bund adjacent to the northern boundary of the extraction area is constructed prior to the commencement of quarrying operations in the extension area.
- 4A. The Applicant must ensure that the noise bund adjacent to Greendale Road is constructed prior to the commencement of brick making operations.

Operating Conditions

5. The Applicant **must**:
 - (a) implement all reasonable and feasible mitigation measures to minimise construction, operational and road noise of the development;
 - (b) implement periods of respite during the construction of the new site access road and associated road alignment works, and the noise bund adjacent to Greendale Road;
 - (c) regularly assess noise monitoring data and relocate, modify and/or stop operations on site to ensure compliance with the noise criteria in this consent;
 - (d) maintain the effectiveness of noise suppression equipment on plant and equipment on site;
 - (e) minimise the noise impacts of the development during meteorological conditions under which the noise criteria in this consent do not apply (see Appendix 5); and
 - (f) carry out regular noise monitoring to determine whether the development is complying with the relevant conditions of this consent, to the satisfaction of the Secretary.

Noise Management Plan

6. The Applicant **must** prepare a Noise Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (c) describe the reasonable and feasible mitigation measures that would be implemented to ensure:
 - construction noise is minimise;
 - compliance with the relevant noise criteria and operating conditions in this consent;
 - best management practice is being employed; and
 - the noise impacts of the development are minimised during meteorological conditions under which the noise criteria in this consent do not apply;
 - (d) describe the proposed noise management system on site; and
 - (e) include a quarterly (or as otherwise agreed with the Secretary) noise monitoring program that:
 - uses attended monitoring to evaluate the compliance of the development against the noise criteria in this consent;
 - evaluates and reports on the effectiveness of the noise management system and the best practice noise management measures; and
 - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

AIR QUALITY

Air Quality Criteria

7. The Applicant **must** implement all reasonable and feasible avoidance and mitigation measures so that particulate matter emissions generated by the development do not exceed the criteria in Tables 3 to 6 at any residence on privately-owned land.

Table 3: Long-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Total suspended particulates (TSP)	Annual	^a 90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 4: Short-Term Criteria for Particulate Matter

Pollutant	Averaging period	^d Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	^a 50 µg/m ³

Table 5: Long-Term Criteria for Deposited Dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
^c Deposited dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

Table 6: Long and Short-Term Stack Emissions

Pollutant	Averaging period	^d Criterion
Sulphur Dioxide	10-minute	712 µg/m ³
	1-Hour	570 µg/m ³
	24-Hour	228 µg/m ³
	Annual	60 µg/m ³
Nitrogen Dioxide	1-Hour	246 µg/m ³
	Annual	62 µg/m ³
Hydrogen Chloride	1 hour	0.14 mg/m ³

Notes to Tables 3-6:

- ^a Total impact (i.e. incremental increase in concentrations due to the development plus background concentrations due to all other sources).
- ^b Incremental impact (i.e. incremental increase in concentrations due to the development on its own).
- ^c 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, illegal activities or any other activity agreed by the Secretary in consultation with EPA.

Operating Conditions

8. The Applicant **must**:
 - (a) implement all reasonable and feasible measures to minimise the stack and dust emissions of the development;
 - (b) minimise surface disturbance and maximise progressive rehabilitation;
 - (c) minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events (see note (d) to Tables 3-6 above); and
 - (d) monitor and report on compliance with the relevant air quality conditions in this consent; to the satisfaction of the Secretary.

Air Quality Management Plan

9. The Applicant **must** prepare an Air Quality Management Plan for the development to the satisfaction of the Secretary. This plan must:
 - (a) be prepared in consultation with the EPA;
 - (b) be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (c) describe the measures that would be implemented to ensure:
 - compliance with the air quality criteria and operating conditions under this consent;
 - best practice management is being employed; and
 - the air quality impacts of the development are minimised during adverse meteorological conditions;
 - (d) describe the air quality management system; and
 - (e) include an air quality monitoring program that:
 - evaluates and reports on:
 - the effectiveness of the air quality management system; and
 - compliance with the air quality criteria and operating conditions; and
 - defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

METEOROLOGICAL MONITORING

10. For the life of the development, the Applicant **must** ensure that there is a suitable meteorological station operating in the vicinity of the site that:
- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
 - (b) is capable of continuous measurement of stability class, in accordance with the *NSW Industrial Noise Policy*, or as otherwise approved by EPA.

TRANSPORT

Monitoring of Product Transport

11. The Applicant **must** keep accurate records of the:
- (a) **tonnage** of bricks transported from the site (monthly and annually);
 - (b) amount of raw material imported to the site (monthly and annually); and
 - (c) **tonnage of each type of raw materials imported to the site (monthly and annually);** and provide the Secretary with a summary of this information upon request.

Parking

12. The Applicant **must** provide sufficient parking on-site for all development-related traffic, in accordance with Camden Council's parking codes, to the satisfaction of the Secretary.

Operating Conditions

13. The Applicant **must** ensure that:
- (a) all development-related heavy vehicles enter and exit the site in a forward direction;
 - (b) all laden vehicles entering or exiting the site have their loads covered (with the exception of vehicles carrying bricks);
 - (c) all laden vehicles that have accessed the extraction and/or stockpile areas are cleaned of sand and other material that may fall on the road, before leaving the site;
 - (d) all heavy vehicles exiting the site travel east of the site along Greendale Road to The Northern Road and/or Bringelly Road;
 - (e) the dispatch of laden trucks is avoided during the peak drop-off and pick-up times at the Bringelly Public School to the greatest extent practicable, particularly prior to the upgrade of the Greendale Road/Bringelly Road intersection by RMS; and
 - (f) no trucks queue at the entrance to the site before 6am.

Access Road Intersection Construction

14. Within 12 months of commencing development under this consent, unless otherwise agreed with the Secretary, the Applicant must design and construct the new site access road intersection with Greendale Road in accordance with applicable AUSTROADS standards, to the satisfaction of Camden Council. The Applicant must notify the Secretary in writing within 30 days of obtaining Council approval.

Within 7 days of completing construction and the new site access road being operational, the existing site access road must be permanently closed.

Transport Management Plan

15. The Applicant **must** prepare a Transport Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with RMS, Camden Council, Liverpool City Council and Bringelly Public School, and be submitted to the Secretary for approval prior to the commencement of **development** under this consent, unless the Secretary agrees otherwise;
 - (b) describe the measures that would be implemented to ensure compliance with the transport operating conditions under this consent, including specific measures to avoid **the arrival and**

- dispatch of laden trucks from the site during the peak drop-off and pick-up times at the Bringelly Public School;
- (c) include a Code of Conduct for heavy vehicle drivers that addresses:
- travelling speeds;
 - procedures to minimise noise including a regular Truck Noise Auditing Program;
 - procedures to minimise diesel exhaust emissions;
 - instructions to avoid grouping or convoying of trucks;
 - procedures to ensure that drivers adhere to the designated haulage routes and the haulage hours permitted under this consent;
 - instructions to drivers not to overtake each other on the haulage route, as far as practicable, and to maintain appropriate distances between vehicles; and
 - instruction to drivers to be properly safety conscious and to strictly obey all traffic regulations, particularly in relation to school zones along Greendale Road; and
- (d) describe the measures that would be put in place to ensure compliance with the drivers' Code of Conduct and include a program to monitor the effectiveness of the implementation of these measures.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

SOIL AND WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Applicant is required to obtain the necessary water licences for the development, including in respect of the extraction and/or interception of groundwater.

Water Supply

16. The Applicant **must** ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of operations under the consent to match its available water supply to the satisfaction of the Secretary.

Water Discharges

17. The Applicant **must** comply with the discharge limits in any EPL or with Section 120 of the POEO Act.

Water Management Plan

18. The Applicant **must** prepare a Water Management Plan for the development to the satisfaction of the Secretary. This plan must:
- (a) be prepared by suitably qualified person/s approved by the Secretary;
 - (b) be prepared in consultation with the EPA and **DPI Water**;
 - (c) be submitted to the Secretary for approval **prior to the commencement of development under this consent**, unless the Secretary agrees otherwise;
 - (d) include a Site Water Balance that:
 - includes details of:
 - quantity of water required to support operations;
 - sources and security of water supply;
 - water use and management on site;
 - reporting procedures; and
 - measures to be implemented to minimise potable water use on site;
 - (e) include a Surface Water Management Plan, that includes:
 - baseline data on surface water flows and quality in the watercourses that could be affected by the development;
 - a description of the surface water management system on site, including:
 - clean water diversions;
 - erosion and sediment controls;
 - the dirty water management system; and
 - water storages (addressing maximum harvestable rights if applicable);
 - performance criteria, including trigger levels for investigating any potentially adverse surface water quality impacts;
 - a program to monitor and report on:
 - any surface water discharges;

- the effectiveness of the water management system; and
 - surface water flows and quality in local watercourses;
 - a plan to respond to any exceedances of the performance criteria.
- (f) a Groundwater Management Plan, which includes:
- baseline data on groundwater levels, yield and quality in surrounding aquifers;
 - groundwater assessment and performance criteria, including trigger levels for investigating potentially adverse groundwater impacts;
 - a program to monitor:
 - groundwater inflows to the quarry pit; and
 - impacts of the development on surrounding aquifers;
 - an analysis of the monitoring results to determine long-term water levels within the quarry void; and
 - a plan to respond to any exceedances of the performance criteria.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

BIODIVERSITY

Biodiversity Offset Strategy

19. The Applicant **must** implement the Biodiversity Offset Strategy described in the EIS, as summarised in Table 7 and shown conceptually in Appendix 4, to the satisfaction of the Secretary.

Table 7: Summary of the Biodiversity Offsets

Area	Offset Criteria	Size (Ha)
On-site offset	Existing vegetation to be enhanced to establish an area of native woodland comprising species associated with Cumberland Plain Woodland.	1.93

Security of Offsets

20. Within 2 years of **notifying the Department of commencement of development (see condition 8 of Schedule 2)**, unless otherwise agreed with the Secretary, the Applicant **must** make suitable arrangements to provide appropriate long-term security for the offset area, to the satisfaction of the Secretary.

Note: Mechanisms to provide appropriate long term security to the land within the Biodiversity Offset Strategy include a Biobanking Agreement, Voluntary Conservation Agreement or an alternative mechanism that provides for a similar conservation outcome. Any mechanism must remain in force in perpetuity.

Biodiversity Management Plan

21. The Applicant **must** prepare a Biodiversity Management Plan for the project to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with the OEH and Camden Council;
 - (b) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - (c) describe how the implementation of the biodiversity offset strategy would be integrated with the overall rehabilitation of the site;
 - (d) describe the short, medium, and long term measures that would be implemented to:
 - manage the remnant vegetation and habitat on the site and in the offset area and;
 - implement the biodiversity offset strategy, including detailed performance and completion criteria;
 - (e) include performance and completion criteria for evaluating the performance of the biodiversity offset strategy, and triggering remedial action (if necessary);
 - (f) include a description of the measures that would be implemented over the next 3 years, including the procedures to be implemented for:
 - maximising the salvage of resources within the approved disturbance area - including vegetative, soil and cultural heritage resources – for beneficial reuse in the enhancement of the biodiversity areas or rehabilitation area;

- minimising the impacts on fauna on site, including pre-clearance surveys and minimising the potential exposure to tailings;
 - controlling weeds and feral pests;
 - controlling erosion;
 - controlling access; and
 - bushfire management;
- (g) identify the potential risks to the successful implementation of the biodiversity offset strategy, and include a description of the contingency measures that would be implemented to mitigate against these risks; and
- (h) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

The Applicant must implement the approved management plan as approved from time to time by the Secretary.

Conservation Bond

22. Within 6 months of the approval of the Biodiversity Management Plan, the Applicant **must** lodge a conservation bond with the Department to ensure that the biodiversity offset strategy is implemented in accordance with the performance and completion criteria of the Biodiversity Management Plan.

The sum of the bond **must** be determined by:

- a. calculating the full cost of implementing the biodiversity offset strategy (other than land acquisition costs); and
- b. employing a suitably qualified quantity surveyor to verify the calculated costs,
- c. to the satisfaction of the Secretary.

The calculation of the conservation bond must be submitted to the Department for approval at least 1 month prior to lodgement of the final bond.

If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Secretary, the Secretary will release the bond.

If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Secretary will call in all, or part of, the conservation bond, and arrange for the satisfactory completion of the relevant works.

Notes:

- *Alternative funding arrangements for long term management of the biodiversity offset strategy, such as provision of capital and management funding as agreed by OEH as part of a Biobanking Agreement or transfer to conservation reserve estate (or any other mechanism agreed with OEH) can be used to reduce the liability of the conservation bond.*
- *The sum of the bond may be reviewed in conjunction with any revision to the biodiversity offset strategy or the completion of major milestones within the approved plan.*

REHABILITATION

Rehabilitation Objectives

23. The Applicant **must** rehabilitate the site to the satisfaction of the Secretary. Rehabilitation must:
- a. comply with the objectives in Table 8; and
 - b. be generally consistent with the proposed rehabilitation strategy in the EIS, and the final land form shown conceptually in Appendix 4 (unless modified by the Final Land Use Options Plan, prepared in accordance with condition 25 of this consent).

Table 8: Rehabilitation Objectives

Feature	Objective
Site (as a whole)	<ul style="list-style-type: none"> • Safe, stable and non-polluting • Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of local native species and habitat

Surface infrastructure	<ul style="list-style-type: none"> To be decommissioned and removed (unless the Secretary agrees otherwise)
Final void	<ul style="list-style-type: none"> Minimise the size, depth and slope of the batters of the final void Minimise the drainage catchment of the final void
Quarry pit floor	<ul style="list-style-type: none"> Landscaped and revegetated using native flora species, above the anticipated final void water level
Community	<ul style="list-style-type: none"> Ensure public safety

Progressive Rehabilitation

24. The Applicant **must** rehabilitate the site progressively, that is, as soon as reasonably practicable following disturbance. All reasonable and feasible 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.

Final Land Use Options Plan

25. The Applicant **must** prepare a Final Land Use Options Plan for the site to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with DRE and Camden Council;
 - be submitted to the Secretary for approval within 2 years of the date of [notifying the Department of commencement of development \(see condition 8 of Schedule 2\)](#), unless the Secretary agrees otherwise;
 - provide details of the conceptual final landform and associated final land uses for the site;
 - ensure that the conceptual final land form is compatible with surrounding land uses, and is consistent with the rehabilitation objectives in Table 8 and the objectives of the Growth Centres SEPP for the South West Growth Centre;
 - inform the Rehabilitation Management Plan (prepared in accordance with condition 26 of this consent); and
 - be reviewed every 7 years to account for applicable land use priorities, and if necessary updated.

Rehabilitation Management Plan

26. The Applicant **must** prepare a Rehabilitation Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH, DRE, [DPI Water](#) and Camden Council;
 - be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - provide details of the conceptual final landform and associated land uses for the site (which must be consistent with the Final Land Use Options Plan under condition 25 of this consent);
 - describe the short, medium and long term measures that would be implemented to:
 - manage remnant vegetation and habitat on site; and
 - ensure compliance with the rehabilitation objectives and progressive rehabilitation obligations in this consent;
 - include detailed performance and completion criteria for evaluating the performance of the rehabilitation of the site, including triggers for any necessary remedial action;
 - include a program to monitor and report on the effectiveness of these measures, and progress against the performance and completion criteria; and
 - include details of who would be responsible for monitoring, reviewing, and implementing the plan.

[The Applicant must implement the approved management plan as approved from time to time by the Secretary.](#)

Note: The Rehabilitation Management Plan must be reviewed, and if necessary updated, following any update of the Final Land Use Options Plan.

HERITAGE

Heritage Management Plan

27. The Applicant **must** prepare a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:
- be prepared in consultation with OEH;
 - (a) be submitted to the Secretary for approval prior to undertaking quarrying operations in the extension area, unless the Secretary agrees otherwise;
 - b. describe the measures that would be implemented to:
 - manage identified heritage objects, previously unidentified heritage objects or the discovery of any human remains on site;
 - ensure ongoing consultation with Aboriginal stakeholders in the conservation and management of any Aboriginal cultural heritage values on site; and
 - protect sites identified adjacent to the development.

The Applicant **must** implement the approved management plan as approved from time to time by the Secretary.

VISUAL

28. The Applicant **must** establish a vegetation screen on both noise bunds, as soon as practicable after construction of the bunds, to minimise visibility of site infrastructure from outside the development area. Following establishment, the Applicant **must** maintain the vegetation screen, to the satisfaction of the Secretary.
29. The Applicant **must**:
- implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the development; and
 - b) ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1997 – Control of Obtrusive Effects of Outdoor Lighting*, or its latest version.

BUSHFIRE MANAGEMENT

30. The Applicant **must**:
- ensure that the development is suitably equipped to respond to any fires on site; and
 - b) assist the Rural Fire Service, emergency services and National Parks and Wildlife Service as much as practicable if there is a fire in the surrounding area.

WASTE

31. Prior to importing onto the site any material that may be classified as a waste under the EPA *Waste Classification Guidelines 2009* (or its latest version), the Applicant must obtain a 'resource recovery exemption' under the POEO Act and provide evidence of this exemption to the Department.

Note: This condition does not apply to routine deliveries to the site.

32. The Applicant **must**:
- manage on-site sewage treatment and disposal in accordance with the requirements of its EPL, and to the satisfaction of the EPA and Camden Council; and
 - b) pump all sewage generated and stored on-site to a sewage treatment facility, unless otherwise agreed with the Secretary.
33. The Applicant **must**:
- minimise the waste generated by the development;
 - b) ensure that the waste generated by the development is appropriately stored, handled, and disposed of; and
 - c) report on waste management and minimisation in the Annual Review, to the satisfaction of the Secretary.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. As soon as practicable after obtaining monitoring results showing an exceedance of any relevant criteria in schedule 3, the Applicant **must** notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the development is again complying with the relevant criteria.

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers the development to be exceeding the relevant criteria in schedule 3, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.

If the Secretary is satisfied that an independent review is warranted, then within 2 months of the Secretary's decision the Applicant **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 development is complying with the relevant criteria in schedule 3;
 - if the development is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Secretary and landowner a copy of the independent review.

SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. If the Secretary requires, the Applicant must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must:
 - (a) be submitted to the Secretary for approval within 6 months of the Secretary requiring preparation of the strategy by notice to the Applicant;
 - (b) provide the strategic framework for environmental management of the development;
 - (c) identify the statutory approvals that apply to the development;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the development;
 - (e) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - respond to emergencies; and
 - (f) include:
 - copies of any strategies, plans and programs approved under the conditions of this consent; and
 - a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.

The Applicant must implement any Environmental Management Strategy as approved from time to time by the Secretary.

Adaptive Management

2. The Applicant must assess and manage development-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 consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

Where any exceedance of these criteria and/or performance measures has occurred, the Applicant must, at the earliest opportunity:

- (a) take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
- (c) implement remediation measures as directed by the Secretary; to the satisfaction of the Secretary.

Management Plan Requirements

3. The Applicant must ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include:
 - (a) detailed baseline data;
 - (b) a description of:
 - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
 - any relevant limits or performance measures/criteria; and
 - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;
 - (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
 - (d) a program to monitor and report on the:

- impacts and environmental performance of the development; and
- effectiveness of any management measures (see (c) above);
- (e) a contingency plan to manage any unpredicted impacts and their consequences;
- (f) a program to investigate and implement ways to improve the environmental performance of the development over time;
- (g) a protocol for managing and reporting any:
 - incidents;
 - complaints;
 - non-compliances with statutory requirements; and
 - exceedances of the impact assessment criteria and/or performance criteria; and
- (h) a protocol for periodic review of the plan.

Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Annual Review

4. By the end of September each year, the Applicant [must submit a report to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary](#). This review must:
 - (a) describe the development (including rehabilitation) that was carried out in the previous [financial](#) year, and the development that is proposed to be carried out over the current [financial](#) year;
 - (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous [financial](#) year, which includes a comparison of these results against:
 - the relevant statutory requirements, limits or performance measures/criteria;
 - the monitoring results of previous years; and
 - the relevant predictions in the [documents in condition 2\(a\) of Schedule 2](#);
 - (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) describe what measures will be implemented over the current [financial](#) year to improve the environmental performance of the development.

Revision of Strategies, Plans and Programs

5. [Within 3 months of the submission of an:](#)
 - (a) [Annual Review under condition 4 above;](#)
 - (b) [incident report under condition 7 below;](#)
 - (c) [audit report under condition 9 below; and](#)
 - (d) [any modifications to this consent,](#)
 the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Secretary.

Note: 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 development.

Community Consultative Committee

6. The Applicant [must](#) establish and operate a Community Consultative Committee (CCC) for the development to the satisfaction of the Secretary. This CCC must be operated in general accordance with the [Guidelines for Establishing and Operating Community Consultative Committees for Mining Developments](#) (Department of Planning, 2007, or its latest version), and be operating [prior to the commencement of development under this consent](#).

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.*

- In accordance with the guideline, the Committee should comprise an independent chair and appropriate representation from the Applicant, Camden Council and the local community.

REPORTING

Incident Reporting

7. The Applicant **must** immediately notify the Secretary and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant **must** provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

8. The Applicant **must** provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.

INDEPENDENT ENVIRONMENTAL AUDIT

9. Within a year of **commencing development under this consent**, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant **must** commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) include consultation with the relevant agencies;
 - (c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent and any relevant EPL and/or Water Licence (including any assessment, plan or program required under these approvals);
 - (d) review the adequacy of any approved strategy, plan or program required under these approvals;
 - (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals; **and be conducted and reported to the satisfaction of the Secretary.**

Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.

10. Within **12 weeks of commencing** this audit, unless the Secretary agrees otherwise, the Applicant **must** submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report, including a timetable for the implementation of any measures proposed to address the recommendations in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.

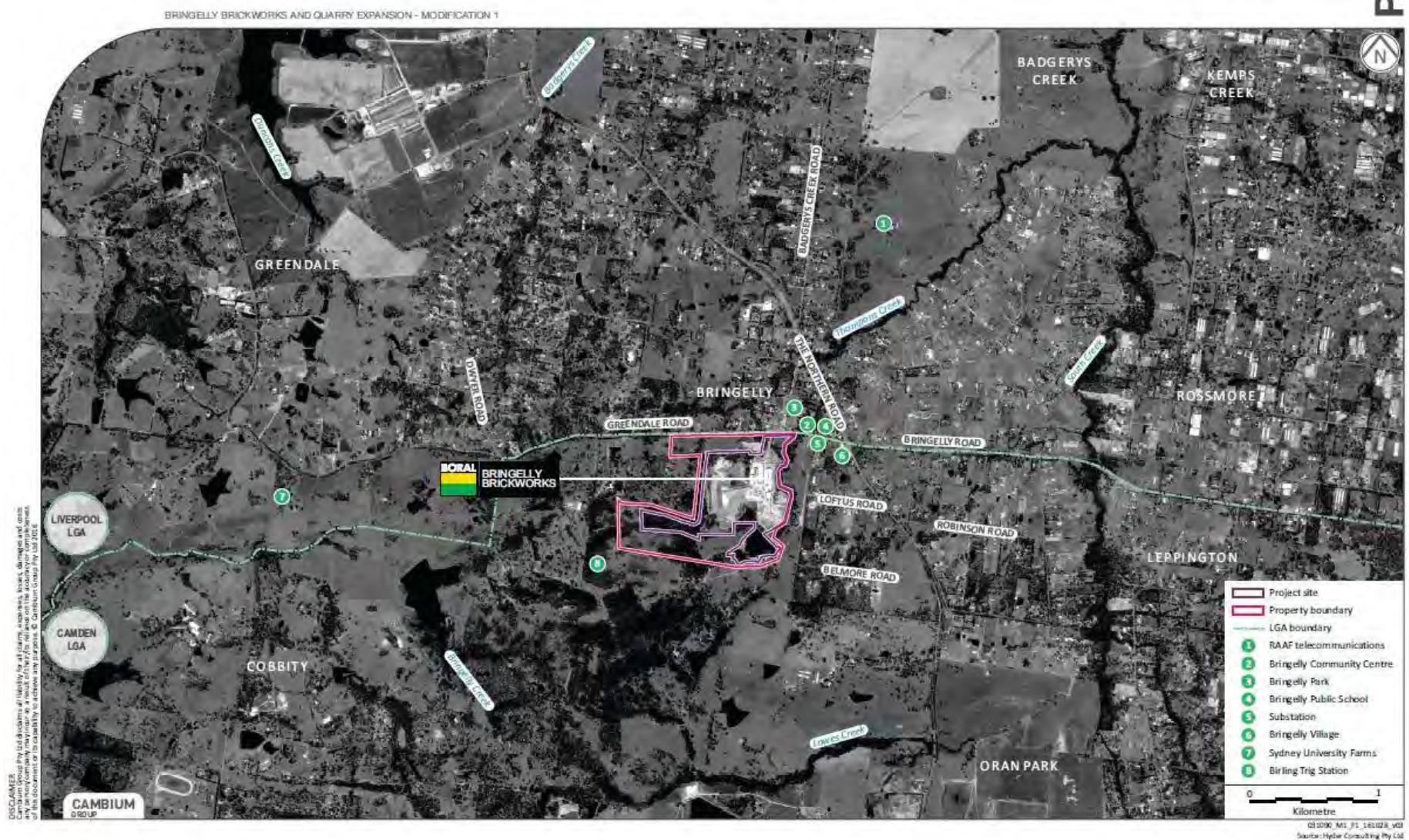
Within 7 days of commencing the audit, the Applicant must notify the Department in writing of the commencement of the audit.

ACCESS TO INFORMATION

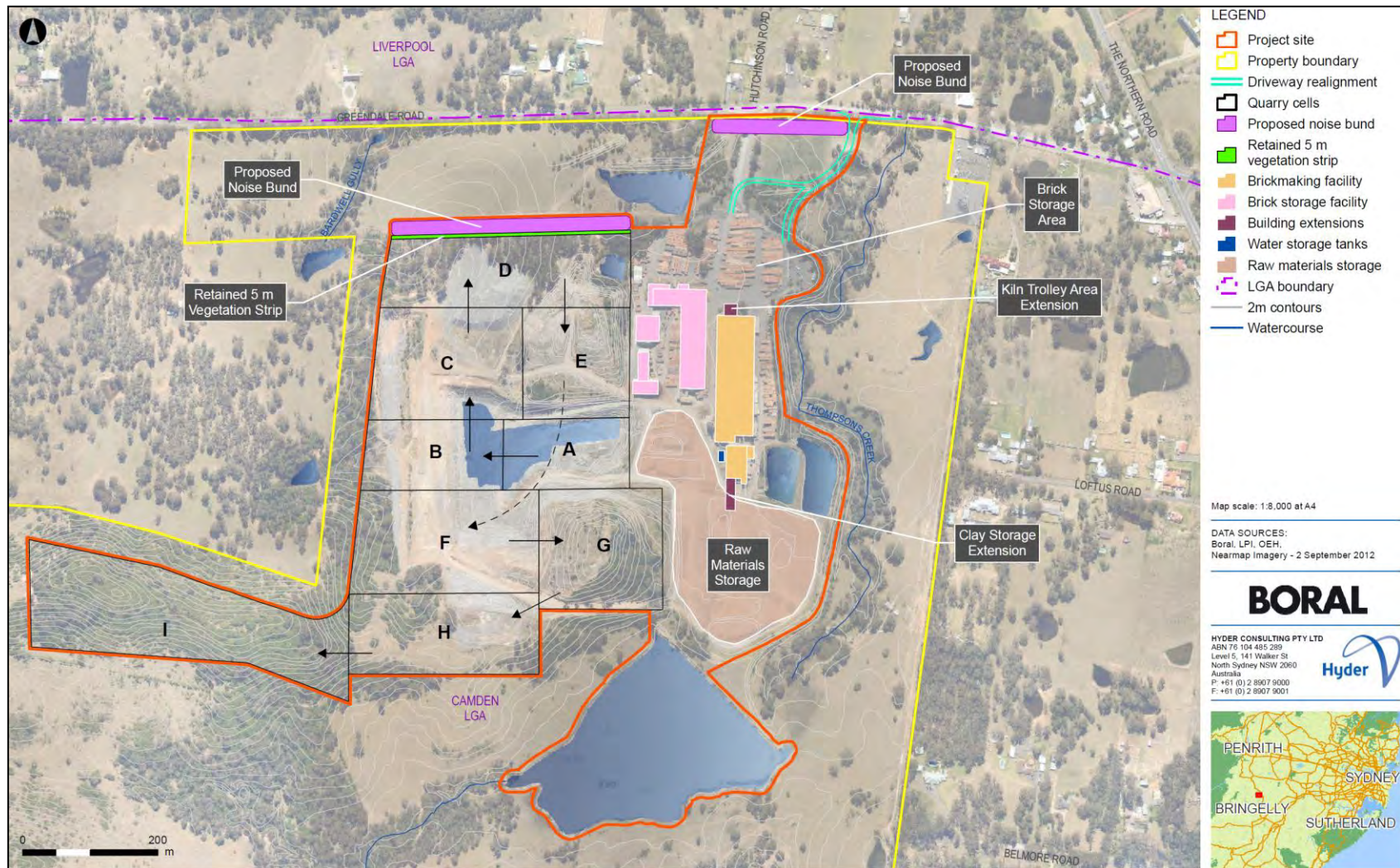
11. Within 6 months of **commencing development under this consent**, the Applicant **must**:
 - (a) make copies of the following publicly available on its website:
 - the documents in **condition 2(a) of Schedule 2**;
 - current statutory approvals for the development;
 - approved strategies, plans and programs required under the conditions of this consent;
 - a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;
 - a complaints register, which is to be updated monthly;
 - minutes of CCC meetings;
 - the annual reviews of the development (for the last 5 years);
 - any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit;
 - any other matter required by the Secretary; and

(b) keep this information up-to-date,
to the satisfaction of the Secretary.

APPENDIX 1 DEVELOPMENT AREA



APPENDIX 2 DEVELOPMENT LAYOUT



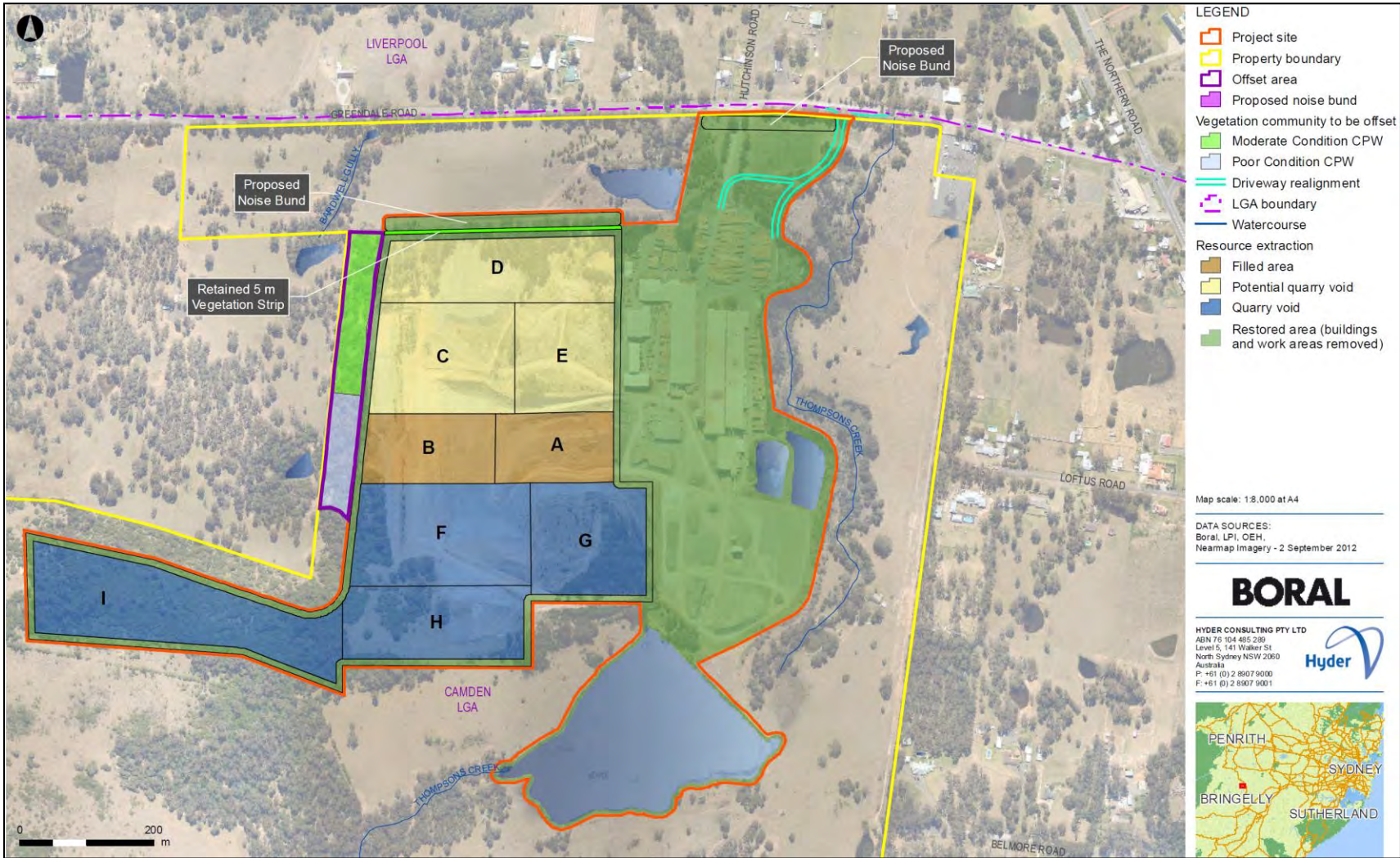
APPENDIX 3 RECEIVER LOCATIONS



Receiver number	Receiver address
1	55 Loftus Road
2	54 Loftus Road
3	20 Greendale Road
4	9 Greendale Road
5	5 Greendale Road (Bringelly Community Centre)
6	46 Loftus Road
7	36 Loftus Road
8	47 Loftus Road
9	37 Loftus Road
10	27 Loftus Road
11	26 Loftus Road
12	15 Loftus Road
13	5 Loftus Road
14	23 Greendale Road
15	27 Greendale Road
16	29 Greendale Road
17	25 Greendale Road
18	31 Greendale Road
19	35 Greendale Road
20	170 Tyson Road
21	196 Greendale Road
22	46 Belmore Road
23	55 Belmore Road
24	63 Belmore Road
25	67 Belmore Road
26	73 Belmore Road
27	83-85 Belmore Road
28	76 Belmore Road
29	86 Belmore Road
30	87 Belmore Road
31	93 Belmore Road
32	95-97 Belmore Road
33	107 Belmore Road
34	96 Belmore Road
35	108 Belmore Road
36	1037 Northern Road
37	10 Greendale Road
38	Bringelly Public School

APPENDIX 4

CONCEPTUAL FINAL LANDFORM AND BIODIVERSITY OFFSET STRATEGY



APPENDIX 5 NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Table 2 of the conditions are to apply under all meteorological conditions except the following:
 - (a) wind speeds greater than 3 m/s at 10 m above ground level; or
 - (b) temperature inversion conditions between 1.5 °C and 3°C/100 m and wind speeds greater than 2 m/s at 10 m above ground level; or
 - (c) temperature inversion conditions greater than 3°C/100 m.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions **must** be that recorded by the meteorological station on or in the vicinity of the site.

Compliance Monitoring

3. Unless directed otherwise by the Secretary, quarterly attended monitoring is to be used to evaluate compliance with the relevant conditions of consent.

Note: The Secretary may direct that the frequency of attended monitoring increase or decrease at any time during the life of the development.

4. Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
 - (a) monitoring locations for the collection of representative noise data;
 - (b) meteorological conditions during which collection of noise data is not appropriate;
 - (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
 - (d) modifications to noise data collected including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

Muller Acoustic Consulting Pty Ltd
PO Box 262, Newcastle NSW 2300
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Appendix P

DPIE Warning Letter



PGH Bricks & Pavers
39 DELHI ROAD
NORTH RYDE NSW 2113

BY EMAIL: decook@pghbricks.com.au

14 January 2021

Attention: Ms Debbie Cook, National WHSE Manager CSR Masonry & Insulation

Dear Ms Cook

WARNING LETTER

BREACH OF SECTION 4.2(1)(b) OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Bringelly Brickworks Quarry Extension (SSD-5684)

Following an investigation, the Department of Planning, Industry and Environment (**Department**) has determined that PGH Bricks and Pavers Pty Ltd (**PGH**) has committed an offence against section 4.2(1)(b) of the *Environmental Planning and Assessment Act 1979* (**Act**) by carrying out development not in accordance with the conditions of development consent. Further details of the breach are set out below.

PARTICULARS OF BREACH

The event report prepared by PGH, submitted by email on 10 December 2020 reports that PGH has failed to comply with Schedule 2, Conditions 7b and 7c of SSD 5684 (**Consent**) particularised in the table at **Attachment A**.

WARNING

The Department has assessed the significance of the breaches against the Department's Compliance Policy to determine the appropriate compliance action.

In reaching its decision, the Department has considered the particulars of the breaches and the matters set out in the table at **Attachment A**.

The Department considers the issuing of a **Warning Letter** to be the most appropriate action in this instance.

A Warning Letter is an informal action taken where a breach has been established and the Department has determined that no formal enforcement action is warranted in the circumstances.

The issue of a warning does not preclude the Department from taking further enforcement action in relation to the breach, if it becomes apparent that an alternative response is more appropriate.

The Department will retain a copy of this warning on file. If you commit an offence in the future, the Department will consider this warning when determining the most appropriate enforcement action.

If you wish to discuss the matter further, please contact Gabriel Abi-Saab on 02 9274 6527.

Yours sincerely

A handwritten signature in black ink, appearing to read 'JPope', is positioned above the printed name.

Julia Pope

Team Leader Compliance Metro

Attachment A – Non-compliances reported by PGH

Condition of Consent	Particulars of each non-compliance report by PGH	Matters considered by the Department
<p>Schedule 2, Condition 7b states:</p> <p>The Applicant shall not:</p> <ul style="list-style-type: none"> a. ... b. receive more than 90 trucks to the site per day or more than 18 trucks per hour. 	<p>PGH reported that a non-compliance against Condition 7b of the Consent was identified by email dated 10 December 2020 following a review of truck movements in November 2020.</p> <p>The review identified that the number of trucks received exceeded the limitations of Condition 7b as follows:</p> <ul style="list-style-type: none"> • 10 November 2020: 101 trucks received; • 16 November 2020: 94 trucks received; and • 17 November 2020: 93 truck received 	<ul style="list-style-type: none"> • A series of corrective actions have since been developed and implemented as detailed by email dated 10 December 2020: <ul style="list-style-type: none"> ○ Appoint a single point of contact responsible for daily truck allocation/control - Completed; ○ Implement a system that contains details of all truck movements (finished goods – imports, dispatch, pickups, raw material and manufacturing services) – Completed ○ Investigated weighbridge options that can provide - In progress: <ul style="list-style-type: none"> ▪ Visibility (in real time); ▪ Historic Data; ▪ Notification; and ▪ Prevent Physical access/leaving. • There were no known impacts on the surrounding environment or the amenity of nearby residents.
<p>Schedule 2, Condition 7c states:</p> <p>The Applicant shall not:</p> <ul style="list-style-type: none"> a. ... b. ... c. dispatch more than 90 trucks from the site per day or more than 18 trucks per hour. 	<p>PGH reported that a non-compliance against Condition 7c of the Consent was identified by email dated 10 December 2020 following a review of truck movements in November 2020.</p> <p>The review identified that the number of trucks dispatched exceeded the limitations of Condition 7c as follows:</p> <ul style="list-style-type: none"> • 10 November 2020: 101 trucks dispatched; • 16 November 2020: 94 trucks dispatched; and • 17 November 2020: 93 trucks dispatched 	



Beyond Compliance

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